Installation Guide for Windows

SAP BusinessObjects Enterprise XI 3.1

windows

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Contents

Getting Started

chapter 1

About this documentation

Note:
This document relates to the full installation of SAP BusinessObjects Enterprise XI 3.1. For information on the full installation of SAP BusinessObjects Enterprise XI 3.1 Service Pack 3, see the installation guide for SAP BusinessObjects Enterprise XI 3.1 Service Pack 3.

This documentation provides information, procedures, and options for installing, removing, and repairing BusinessObjects Enterprise, client tools, and language packs. Two versions of this guide exist:

- *SAP BusinessObjects Enterprise Installation Guide for Windows*: for use with Microsoft Windows operating systems.
- *SAP BusinessObjects Enterprise Installation Guide for UNIX*: for use with UNIX and Linux operating systems.

Note:
Information related to the post-installation deployment of WAR files to a Java web application server is now covered by the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

Who should read this documentation

This documentation is intended for the system administrator who needs to install BusinessObjects Enterprise on a Microsoft Windows operating system. Familiarity with your overall network environment, port usage conventions, database environment, and web server software, is essential.

Note:
If you are installing BusinessObjects Enterprise on a UNIX or Linux operating system, please read the *SAP BusinessObjects Enterprise Installation Guide for UNIX*.

SAP BusinessObjects Enterprise guides

The following table provides a list of SAP BusinessObjects Enterprise guides and their contents.

Guide	Description
SAP BusinessObjects Enterprise Planning Guide	Covers the key concepts you should consider before you begin deploying SAP BusinessObjects Enterprise. This guide includes an overview of the architecture, tips for assessing your existing environment, determining your organization's needs, and preparing for the installation.
SAP BusinessObjects Enterprise Installation Guide	Leads you through the steps required to run the setup program and complete your installation of SAP BusinessObjects Enterprise. There are UNIX and Windows versions of this guide available.
SAP BusinessObjects Enterprise Web Application Deployment Guide	Covers topics related to the deployment of web applications to web application servers with SAP BusinessObjects Enterprise. There are UNIX and Windows versions of this guide available.
SAP BusinessObjects Enterprise Administrator's Guide	Provides content for server and content administration. The server administration topics includes server configuration, managing authentication, configuring firewalls, and measuring system performance. The content administration topics include working with the CMC, configuring rights and access levels, managing users, and working with Business Objects applications and objects.

Guide	Description
SAP BusinessObjects Enterprise Publisher's Guide	Provides an overview of the publishing process, working with publications, publishing Crystal reports, publishing Web Intelligence documents, publishing Desktop Intelligence documents, and publishing security.
SAP BusinessObjects 5/6 to XI 3.1 Migration Guide	Details content migration from legacy Business Objects software, such as Classic or Enterprise 5 or 6, to SAP BusinessObjects Enterprise XI 3.1.
SAP BusinessObjects Enterprise Upgrade Guide	Information for upgrades from BusinessObjects Enterprise XI to SAP BusinessObjects Enterprise XI 3.1.
SAP BusinessObjects Enterprise InfoView User's Guide	Provides an overview of InfoView and working with Crystal Reports, Web Intelligence, objects, discussions, encyclopedia, and Voyager workspaces.

For a complete list of all of our product documentation please visit:
http://support.businessobjects.com/documentation/product_guides/default.asp

What is BusinessObjects Enterprise?

BusinessObjects Enterprise is a flexible, scalable, and reliable business intelligence reporting system that can be tightly integrated into your information technology infrastructure. Support for many industry-standard database systems makes it easier to access your organization's data for analysis. The use of common industry standards for security allow you to use your existing authentication systems to control access to BusinessObjects Enterprise. And broad platform support allows you to install BusinessObjects Enterprise on the operating systems and hardware architecture that you prefer.

As a system administrator, you will be faced with many choices when installing BusinessObjects Enterprise. This documentation helps you to make the right decisions to create a reliable and powerful business intelligence reporting system for your organization.

What's new in the BusinessObjects Enterprise Installation Guide?

The installation and deployment documentation from previous releases of BusinessObjects Enterprise has been split into separate installation and web application deployment guides:

- For information related to the installation of BusinessObjects Enterprise, see the *SAP BusinessObjects Enterprise Installation Guide* (this guide).
- For information related to the post-installation deployment of web applications, see the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

This document is the first to include information on the following features for the Microsoft Windows version of BusinessObjects Enterprise:

Feature	Description
IIS support	The use of the Microsoft Internet Information Services (IIS) web application server version 6 or 7 is now supported on Windows-based BusinessObjects Enterprise servers.
.NET support	The deployment of ASP.NET web applications is now supported on Microsoft operating systems running the IIS web application server. The BusinessObjects Enterprise setup program can automatically deploy .NET support and a .NET version of InfoView during installation.
WACS	A new Web Application Container Server (WACS) allows you to run the Central Management Console (CMC) on Windows machines without the need to install Java.
IPv6 support	IP version 6 (IPv6) addresses can now be used anywhere in BusinessObjects Enterprise.
Response files	The response file information has been updated.

Feature	Description
.NET InfoView	A new .NET-based version of the InfoView application is now supported.
Web application servers	The wdeploy tool now supports the deployment of web applications to: • JBoss 4.2.3 • WebSphere Community Edition 2.0
Operating systems	BusinessObjects Enterprise is now also supported on the following operating systems: • Windows Server 2008 SP2 • Windows Vista SP2

Documentation is available in supported languages from the support web site, and is refreshed with up-to-date content as it becomes available between releases. For the most recent product documentation, visit *http://support.businessobjects.com/documentation*.

Preparing to Install BusinessObjects Enterprise

chapter 2

Installation overview

Before you install BusinessObjects Enterprise, you should:

- Consult the *SAP BusinessObjects Enterprise Planning Guide* to gain a general understanding of the installation process and the different options available.
- Review your systems to ensure they meets the basic requirements for a BusinessObjects Enterprise installation. See *System requirements* .
- Ensure that all machines that will be part of your BusinessObjects Enterprise deployment can communicate across your network. See *Network requirements* .
- Decide which BusinessObjects Enterprise components to install, and which of your own components to integrate.

  Note:
  If you are upgrading from an earlier version of BusinessObjects Enterprise, ensure that all components are at the same patch level before starting the system. If the components are at different patch levels, some components may encounter communication problems.

- Determine the location of the components to be installed. This includes the specific subnet, machine, database, security, or cluster systems that will be used to run your system.
- Decide which installation method to use. See *Installation types*.

The following sections list the core software requirements, the choices available to you within the core requirements, and the installation methods that you can use when you install BusinessObjects Enterprise.

An installation checklist is provided to help ensure you are prepared before you begin your installation of BusinessObjects Enterprise.

Related Topics

- *Installation checklist*
- *System requirements*

System requirements

For a detailed list of supported environments and hardware requirements, consult the Products Availability Report (PAR) document available on the Business Objects support site *http://support.businessobjects.com/documentation/supported_platforms*. This document includes specific version and patch-level requirements for web application servers, web browsers, and operating systems. For information related to the planning of a BusinessObjects Enterprise deployment, consult the *SAP BusinessObjects Enterprise Planning Guide*.

BusinessObjects Enterprise ships with the Tomcat web application server and MySQL database server. If you are planning to use a different web application or database server, it must be installed and configured before BusinessObjects Enterprise.

Related Topics

- *CMS Database requirements and preparation*

Choosing a web development environment

BusinessObjects Enterprise supports Active Server Pages (ASP), Java Server Pages (JSP) and .NET applications (ASP.NET), allowing your organization to use and develop custom web applications for its preferred web application server and operating system platforms.

Java Server Pages allow you to develop cross-platform J2EE applications that use BusinessObjects Enterprise objects in conjunction with your own custom objects, or use objects available from a wide variety third parties. BusinessObjects Enterprise also includes Primary Interop Assemblies (PIAs) that enable you to use the BusinessObjects Enterprise and Report Application Server SDKs with ASP.NET. It also includes a set of .NET Server Components to simplify development of custom web applications in ASP.NET.

Choosing a web application server

With Windows-based BusinessObjects Enterprise deployments, you can use a Java web application server, a .NET web application server, or both. The

default option is to install the Tomcat Java web application server and ASP.NET extensions, so you can utilize both technologies on the same server.

Depending upon your needs, you can use one of these options:

- Java web application server

  InfoView and the Central Management Console (CMC) are both supported on Java web application servers.

  The BusinessObjects Enterprise setup program will install and deploy InfoView and the CMC to Tomcat 5.5 by default.

  If you have one of the following web application servers installed on your system, the setup program can also automatically deploy InfoView and the CMC to it
  - Tomcat 5.5
  - WebLogic 9
  - WebLogic 10
  - WebSphere 6.1
  - Oracle Application Server 10g R3
  - Sun Java Application Server 9.0

  The following web application servers are also supported, but InfoView and the CMC must be manually deployed:
  - SAP Web Application Server 7
  - WebSphere Community Edition 2.0
  - Jboss 4.04

- Microsoft Internet Information Server (IIS) .NET web application server

  InfoView is supported on Microsoft Information Server (IIS), and, when detected, the BusinessObjects Enterprise setup program will automatically install and delpoy InfoView to IIS .

  The CMC is not supported on IIS. In order to manage your BusinessObjects Enterprise system with the CMC, you must deploy the CMC to a Java web application server or install the Web Application Container Service (WACS).

Network requirements

When installing BusinessObjects Enterprise on multiple machines, ensure that each machine can communicate over TCP/IP with the machine running the Central Management Server (CMS), and all other machines in the deployment. A dedicated web server must be able to communicate with the web application server. All web desktop clients must be able to access the web server. For more information on the communication between components please refer to the *Architecture* chapter in the *SAP BusinessObjects Enterprise Planning Guide*.

Note:

- If you are installing BusinessObjects Enterprise in a firewalled environment, see the *Working with Firewalls* chapter of the *SAP BusinessObjects Enterprise Administrator's Guide*.
- If you are installing on a VMware virtual machine, ensure the machine name does not include underscore (_), period (.), or slash (/ or \) characters.

User permissions for installing BusinessObjects Enterprise

To install BusinessObjects Enterprise on Windows, the user running the setup program must have the permissions listed in the table below:

Category	Required permissions
Operating System	Administrative privileges on the local machine.
Network	Network connectivity to all machines in the deployment, as well access to as the appropriate ports on each of the machines.
Database	Rights to create and drop tables, plus rights to read, write, and edit rows. For more information on the database privileges required, see “Databases in BusinessObjects Enterprise” in the *SAP BusinessObjects Enterprise Planning Guide*.
Web application server	Use the same user account for installing both BusinessObjects Enterprise and your web application server, to reduce the likelihood of encountering a problem with access control settings.

Note:

The following scenarios are not supported:

- Installation on a domain controller.
- Installation on a Windows machine where the default local Administrator group security settings have been modified.

Installing on a non-system drive

You can use the setup program to install BusinessObjects Enterprise on any local drive. When installing to the a directory on the same partition as the operating system, ensure that there is enough room for both the operating system and BusinessObjects Enterprise to expand as updates and new features are added.

If you previously installed another Business Objects product of the same version, the BusinessObjects Enterprise setup program automatically uses that installation's common directory to add new Business Objects products.

To install several Business Objects products on a non-system drive, you must first install BusinessObjects Enterprise. All Business Objects products subsequently installed will use the same drive for shared files.

Setting up server communication

- Each BusinessObjects Enterprise machine must be able to communicate over TCP/IP with the machine that runs your Central Management Server (CMS). The CMS is responsible for maintaining a database of information about your BusinessObjects Enterprise system, which other components can access as required. The data stored by the CMS includes information about users and groups, security levels, BusinessObjects Enterprise content, and servers. For more information about the CMS, see the “Managing and Configuring Servers” chapter in the *SAP BusinessObjects Enterprise Administrator's Guide*.
- If the host machine has more than one network interface card (NIC), the CMS may automatically bind to a primary NIC. If the primary NIC is not routable, you may have to configure your servers after installation. Alternatively, you could make the primary NIC routable before installing BusinessObjects Enterprise. For more information on how to reconfigure to bind to routable NICs see the “Managing and Configuring Servers” chapter in the *SAP BusinessObjects Enterprise Administrator's Guide*.
- Servers that run BusinessObjects Enterprise must have a fixed hostname. Administrative privileges are required to set a fixed hostname. You can use fully qualified domain names to specify the location of the CMS.

  Note:
  Please ensure that the host name you use does not include any of the following characters: an underscore (_), a period (.), a back-slash (\), or a forward-slash (/).

- Ensure that your database client and server are set up to use Unicode character encoding, such as UTF-8. Consult your database documentation to determine the settings required for a Unicode configuration.
- If you connect BusinessObjects Enterprise to a web application server, the web application server must be able to communicate with all BusinessObjects Enterprise machines. This communication is enabled by the BusinessObjects Enterprise Software Development Kit (SDK), which is installed as part of the Web Tier Components. If you plan to use a Java application server and your existing application server does not include a version of the Java Development Kit (JDK) supported by BusinessObjects Enterprise, you will need to install it.
- If you are installing BusinessObjects Enterprise in a firewall environment, you will need additional configuration details. See the “Working with

Firewalls" section of the *SAP BusinessObjects Enterprise Administrator's Guide*.

- If you are clustering multiple file repository servers on separate machines, ensure that each server has read and write permissions to the folder used to store data.

Choosing a server location

When planning your BusinessObjects Enterprise installation, you should also consider where you will place your deployment's servers.

Your Crystal Reports Page Server, Desktop Intelligence Report Server, Connection Server, Web Intelligence Report Server, Job Servers, and Report Application Server communicate frequently with the database servers containing the data in your published reports. To optimize data retrieval and minimize network traffic, place your processing servers close to your database servers (ideally, on the same subnet).

If your BusinessObjects Enterprise installation is distributed over a wide geographic region, use server groups to create groups of nearby servers to process reports. The Central Management Server (CMS) stores data about users and groups, security levels, published objects, and servers in the CMS database. The CMS can also maintain a separate audit database of information about user actions. To optimize CMS performance, place your CMS on the same LAN as the database servers that host your CMS database and the BusinessObjects Enterprise audit database. The CMS can be clustered. If you are deploying more than one CMS, ensure each machine that runs a CMS process experiences the same latency to the system database.

Consult the "Managing and Configuring Servers" section of the *SAP BusinessObjects Enterprise Administrator's Guide* for information on other factors that you may want to consider in planning your BusinessObjects Enterprise installation.

Installation types

When you install BusinessObjects Enterprise, you can choose one of the following installation types. Consider which of these types is your best suited for your intended deployment:

- "New": Installs all components on one machine.

  Select this installation type to quickly set up a complete deployment, with all server and client components on a single machine.

- "Custom or Expand": Installs the components that you select on the machine.

  Select this installation type to specify which components to install when performing a distributed deployment, or when adding servers to an existing deployment.

- "Web Tier": Installs only the used by a web application server to run web applications.

  Select this installation type to set up Java or .NET web application components when performing a distributed deployment.

For information on performing installation upgrades, see the *SAP BusinessObjects Enterprise Upgrade Guide*.

"New" installation

Installing a "New" installation puts all of the required client, server, and optional components onto one machine. This configuration can be useful for small, trial, or tested installations. Components can be disabled after the installation if they are not required.

You may want to choose a "New" installation if:

- This is the first time that you've installed BusinessObjects Enterprise, and you are unsure of which components to install.
- You want to install all the components on the same machine.

"Custom or Expand" installation

The "Custom or Expand" installation option allows you to select individual components. It is recommended that you run this type of installation only after you are familiar with specific BusinessObjects Enterprise components and their roles, otherwise you may inadvertently fail to install a required component.

You should perform a "Custom or Expand" installation if you plan to use BusinessObjects Enterprise in a distributed environment. For example, in a distributed deployment you can install the BusinessObjects Enterprise Desktop Intelligence server components on one machine, and use another machine to host Crystal Reports server components.

After setting up one BusinessObjects Enterprise server, you can run a "Custom or Expand" installation on a second machine to add server components, create a CMS cluster, increase available resources, and distribute the processing workload over both machines.

The "Custom or Expand" install features consist of:

- Client Components
- Web Tier Components
- Server Components
- Database Access
- Export Support
- Samples
- Help Files

You may choose to install all, some, or parts of the above components.

Tip:
Consult the “Scaling Your System” section of the *SAP BusinessObjects Enterprise Administrator's Guide* for information on planning how to best expand your installation to meet the needs of your organization. In addition, consult the *SAP BusinessObjects Enterprise Planning Guide* for general scalability considerations, sample configurations, and information about CMS clustering.

You may want to choose a "Custom or Expand" installation if:

- You have already completed your initial installation of BusinessObjects Enterprise and would like to deploy additional components to another machine.
- Your deployment of BusinessObjects Enterprise will be distributed across multiple computers.
- You have resource limitations and need to consider disk space constraints.

"Web Tier" installation

The "Web Tier" option installs all of components used by the web application server to run BusinessObjects Enterprise web applications. These components include:

Component	Description
BI Platform Java Web Components	Installs the Java version of BusinessObjects Enterprise applications including CMC, infoview, and Dashboards and Analytics.
BI Platform .NET Web Components	Installs the .NET version of BusinessObjects Enterprise applications including CMC, infoview, and Dashboards and Analytics.
BusinessObjects Enterprise Web Services	An implementation of web services that provides an API/WSDL to simplify the process of developing web applications.
Tomcat	An open-source, standards-based, Java web application server. If you do not have an existing web application server, you can choose to install Apache Tomcat 5.5.

You may want to choose a "Web Tier" installation if:

- If you want to install the web applications separately from the server components.
- You completed your initial installation of BusinessObjects Enterprise, and you want to configure an additional web application server on a separate machine.

Installation modes

There are two methods that you can use to install BusinessObjects Enterprise:

- Running the installation setup program.

The installation set up program provides a number of screens that allow to select an installation type, specify the details for your CMS database, and to deploy web applications to a supported application server.

- Running a silent or scripted installation.

  A silent or scripted installation uses configuration information that has been stored in a `.ini` response file during a previous command-line installation of BusinessObjects Enterprise. This method is useful when you need to perform multiple installations, or you want to install without the setup program prompting for configuration information.

Silent installation

A silent installation uses configuration information that has been stored in a `.ini` response file during a previous command-line installation of BusinessObjects Enterprise. This method is useful when you need to perform multiple installations, or you want to install without the setup program prompting for configuration information.

You can also incorporate the silent installation command into your own build scripts. For example, if your organization uses scripts to install software on machines, you can add the silent BusinessObjects Enterprise installation command to those scripts.

You may want to choose a silent installation if:

- You need an automated method for performing identical or similar installations on several machines.
- You do not want to run the BusinessObjects Enterprise setup program.

Installing client tools only

You can install the Business Objects client tools by using the BusinessObjects Enterprise Client Tools installation package.

The available tools are:

Client tool	Description
Desktop Intelligence	An integrated query, reporting, and analysis tool to access your organization's data for presentation and analysis in a Desktop Intelligence document.
Web Intelligence Rich Client	Provides business users an interactive and flexible interface for building and analyzing reports from your organization's data over the web, through a secured intra- or extranet.
Data Source Migration Wizard	Migrates reports based on Crystal queries, dictionaries, or InfoViews to BusinessObjects Enterprise.
Business View Manager	Provides relational views of information for creating and modifying Data Connections, Dynamic Data Connections, Data Foundations, Business Elements, or Business Views.
Report Conversion Tool	Converts Desktop Intelligence reports (`.rep` files) to Web Intelligence (`.wid`) format. Converted files can then be published to the Central Management Server (CMS).
Import Wizard	Imports user, group, object, or folder content from previous and current Crystal or BusinessObjects Enterprise deployments.
Publishing Wizard	Publishes and sets properties for multiple reports in BusinessObjects Enterprise.
Query as a Web Service	Creates custom web services for specific queries using Business Objects Web Services.

Client tool	Description
Universe Designer	Creates universe connections for Web Intelligence and Desktop Intelligence documents.
Developer Components	Software Development Kits (SDK) with wizards and templates for integrating BusinessObjects Enterprise functionality into your interactive web applications: • BusinessObjects Enterprise .NET SDK. • BusinessObjects Enterprise Java SDK. • BusinessObjects Enterprise Web Services SDK.
Translation Manager	Defines translations for multilingual documents and prompts. Supports Universe Designer universes and Web Intelligence documents.

Install these applications for users responsible for managing BusinessObjects Enterprise content, developing applications, or importing system data. Client tools are not needed by users who access InfoView or the CMC administrative web applications.

Note:
The BusinessObjects Enterprise Client Tool Setup program does not generally require a license key to activate the product. However, Desktop Intelligence does require that a license key be entered in the CMC after the installation.

CMS Database requirements and preparation

BusinessObjects Enterprise requires a database to store Central Management Server (CMS) information about the system and its users. This database is referred to as the CMS, or system, database.

The following sections detail required settings and how to test settings for:

- DB2
- MySQL
- Oracle

- Sybase

The following sections detail required settings and how to test settings for:

- DB2
- MySQL
- Microsoft SQL Server
- Oracle
- Sybase

Before installing BusinessObjects Enterprise, review this information in order to properly prepare your CMS system and auditing database. For more information on database requirements, refer to the “Databases in BusinessObjects Enterprise” section in the *SAP BusinessObjects Enterprise Planning Guide*.

Note:
Regardless of database type, the database must be setup to use Unicode character encoding, such as UTF-8.

Using MySQL as the Central Management Server (CMS) database

MySQL is an open-source database included with BusinessObjects Enterprise that can be automatically installed and configured for use as the Central Management Server (CMS), or system, database.

If you want to use an existing supported database server, you can enter connection and authentication parameters during the BusinessObjects Enterprise installation process.

To setup a database account for BusinessObjects Enterprise

The Central Management Server (CMS) uses a database to store system information. If you choose to install MySQL as part of your BusinessObjects Enterprise installation, a MySQL CMS database will be created for you. If you plan to use your own database, you should complete the steps listed below before installing BusinessObjects Enterprise.

To create tables and write data to your new CMS database, the installation program needs to establish a connection to the database server. When you log on to the account being used to install BusinessObjects Enterprise, the environment must include the appropriate variables and database drivers to access your chosen database. Only then can the installation program access the CMS database using your database client software.

1. Create or select a user account that provides BusinessObjects Enterprise with the appropriate privileges to your database server.
2. Verify that you can log on to your database and that you have rights to add or remove database tables and to add, delete, or edit table rows with the user account.

Setting up an empty database for the CMS

If you want to use an existing database server as the Central Management Server (CMS) or auditing database, you must create a new tablespace or database before installing BusinessObjects Enterprise.

The installer will prompt for the connection and authentication details if you choose to use your own database during the installation of BusinessObjects Enterprise. The following database servers are supported for the CMS system and audit databases:

- Microsoft SQL Server (ODBC)
- Oracle
- DB2
- MySQL
- Sybase

Note:
Review the online BusinessObjects Enterprise supported platforms document for information related to supported database software and version requirements:*http://support.businessobjects.com/documentation/*.

To integrate your existing database with BusinessObjects Enterprise, you need to prepare it. Here is a summary of the steps to prepare your database:

- Create a new tablespace, schema, or database (the exact terminology will depend on the database platform you're using) to act as the CMS

database. Create a second for the auditing database, if you plan to enable auditing.

- Create a new user account and password to be used by BusinessObjects Enterprise to access the CMS database. Create a second username and password if you plan to enable auditing.
- Specify that the new user account has required permissions to create, modify, and delete tables and create procedures so that database can be modified as required.
- Record the name of the database(s), the user account(s), and the password(s) you created, so you can enter the details when you run the BusinessObjects Enterprise installer.

During the installation, you can choose to reinitialize the existing database. This will cause new tables to be created in your existing database. Consult your specific database server documentation if you are unsure of the procedure for creating a new tablespace, schema, or database. Ensure that your database server is set up to use Unicode character encoding (such as UTF-8).

Note:
If you have a previous release of BusinessObjects Enterprise you cannot use your database from a previous release for BusinessObjects Enterprise. You must create a new database, or existing data from the previous release will be destroyed. To migrate from an previous release, create a new database migrate your old content to the new current version's database after the installation is complete.

Microsoft SQL Server database requirements

If you are using Microsoft SQL Server for the CMS or auditing database:

- Use a collation that supports the Unicode nchar, nvarchar and ntext column data types, such as `Latin1_General_CI_AS`.

Once the database is created, you will need to prepare it for the BusinessObjects Enterprise installation.

Related Topics

- *Preparing an existing database server*

Oracle database requirements

If you are using Oracle for the CMS or auditing database:

- Use a Unicode character set, such as UTF-8.

Once the database is created, you will need to prepare it for the BusinessObjects Enterprise installation.

Related Topics

- *Preparing an existing database server*

DB2 database requirements

If you are using DB2 for the Central Management Console (CMC) or auditing database:

- Ensure that the CMS database is not partitioned.

  Note:
  The auditing database can be partitioned.

- Create the database with these settings:

```
Collating Sequence = "Identity"
Codeset = "UTF-8"
Territory = "XX"
```

  If your DB2 database does not have the correct Collating Sequence setting, the user and usergroup objects may not sort properly in the CMC.

  Replace `XX` with the code that is appropriate for your location. Consult your DB2 documentation for more information.

Once the database is created, you will need to prepare it for the BusinessObjects Enterprise installation.

Related Topics

- *Preparing an existing database server*

MySQL database requirements

If you are using your own MySQL installation for the CMS or auditing database:

- Use a Unicode character set, such as UTF-8.

Once the database is created, you will need to prepare it for the BusinessObjects Enterprise installation.

Related Topics

- *Preparing an existing database server*

Sybase database requirements

If you are using Sybase for the CMS or auditing database:

- Create a database with a page size of 8 KB. The Sybase database default page size is 2KB, which is too small for the CMS system database to run efficiently. The page size is set up during the database creation and cannot be changed after the database is created.
- Use a Unicode character set, such as UTF-8.

Once the database is created, you must prepare it for the BusinessObjects Enterprise installation.

Related Topics

- *Preparing an existing database server*

Preparing an existing database server

After you have created your database, setup the database client, and before you install BusinessObjects Enterprise, ensure that the Central Management Server (CMS) can connect to it.

During your installation, you will be asked whether you want to install MySQL or use an existing database. If you opt to use an existing database, you will be asked for the connection and authentication details by the BusinessObjects Enterprise installer:

Existing database	Information required by installer
MySQL	• Database name • Server name • Port number (default is 3306) • Login credentials used to access database
Sybase	• Server name • Login credentials used to access database **Note:** • The Sybase server name is a combination of the host name and the port number which is set by your database administrator in the file `sql.ini` interfaces file. • BusinessObjects Enterprise will connect to the default database for the user you specify. This default is set by the database administrator.
DB2	• Server: DB2 database alias • Login credentials used to access database
Oracle	• Server: TNSNAMES connect identifier • Login credentials used to access database
Microsoft SQL Server	• ODBC DSN name from the Windows System DSN.

Before you deploy web applications

Your web application server must be installed and working before you attempt to install BusinessObjects Enterprise.

To deploy and run the Central Management Console (CMC) and InfoView web applications, your web application server should have at least 2 GB of free disk space, in addition to any other requirements for other software installed on the machine.

Before deploying to IIS

When installing SAP BusinessObjects Enterprise on an IIS 6 web application server, you may find that the setup program does not enable the option to deploy to IIS 6. If this is the case:

- Ensure that ASP.NET 1.1 is installed.
- Ensure that IIS 6 is installed.
- If you are using the 64-bit version of IIS 6, switch to the 32-bit version of ASP.NET by following the instructions in the Microsoft Support article at *http://support.microsoft.com/?id=894435*.

When installing SAP BusinessObjects Enterprise on an IIS 7 web application server, you may find that the setup program does not enable the option to deploy to IIS 7. If this is the case:

- Ensure that the following development components are installed:
  - ASP.NET
  - .NET Extensibility
  - ASP
  - CGI
  - ISAPI Extensions
  - ISAPI Filters
- Ensure that ASP.NET is enabled.
- Ensure that the advanced IIS 7 setting **Enable 32-bit Applications** is set to "True".
- Ensure that the advanced IIS 7 setting **.NET Application Pool** is set to "Classic" mode.

Beginning the Installation of BusinessObjects Enterprise

chapter 3

Installation checklist

Prior to installing BusinessObjects Enterprise, review the checklist below.

- Have you verified appropriate network connectivity between all machines that will be part of your deployment?
- If you are using your own database server:
  - Have you created a database for the CMS?
  - Have you created an auditing database, if required?
  - Have you created a user id and password with access to your existing database (if you are integrating your existing database server software), so that the installation can access your database to configure the CMS database?
  - Have you made sure you can log onto the database with your logon ID and password?
  - Have you tested the database connection between the machine hosting the database servers and the Central Management Server (CMS)?
  - If you are using DB2 or Sybase, have you verified that your database was created with the correct settings? (Some settings can't be modified after the database has been created.)
  - Has the database client software been properly configured?
- If you are using your own web application server:
  - Have you decided on which web application server to use?
  - Has the server already been installed and configured?
  - Have you ensured that your existing web application server has the required JDK installed?
- If you are installing on a VMware virtual machine, ensure the machine name does not include underscore (_), period(.), or slash (/ or \) characters.

Beginning your installation

Note:
This document relates to the full installation of SAP BusinessObjects Enterprise XI 3.1. For information on the full installation of SAP BusinessObjects Enterprise XI 3.1 Service Pack 3, see the installation guide for SAP BusinessObjects Enterprise XI 3.1 Service Pack 3.

The following instructions lead you through the initial steps of setting up your BusinessObjects Enterprise installation on Windows. In this stage you will do the following:

- Choose the language for the installation setup.
- Agree to the license terms.
- Enter the product key codes.
- Select which language packs to install.
- Select where to install BusinessObjects Enterprise.
- Select an installation type and installation directory.

When you perform the following installation, all the components associated with your product key are installed on the local machine. Default user and group accounts are created, and sample reports are published to the system.

Running the installer

If the installer detects that BusinessObjects Enterprise is already installed on the machine, an error message is displayed. Click **OK** to exit the program. The installer program does not continue if it finds a pre-existing version of BusinessObjects Enterprise.

1. If you are installing from a DVD and the Windows autoplay setting is enabled, the installer will start automatically. If autoplay is not enabled, or you're installing from a hard drive, run `setup.exe` from the root directory of the product distribution media.

   The "Please Choose Setup Language" dialog is displayed.

2. Select the language that you'd like the Setup program to use.

   Note:

   - This setting is only used by the Setup program for the duration of the installation. You select languages to be installed on your new BusinessObjects Enterprise server later.
   - The Setup program will create system objects, such as default user groups, with names localized to the locale of the user running the Setup program.

   You have a choice of the following languages for setup:

   - Chinese Simplified

- Chinese Traditional
- Danish
- Dutch
- English
- French
- German
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese (Brazil)
- Russian
- Spanish
- Swedish
- Thai

3. Deselect **Create log file during installation** if you don't want the installer to create a log file.

   The log file is created as: `<INSTALLDIR>\BusinessObjects Enterprise 12.0\Logging\BOEInstall_X.log`.

4. Click **OK**.

   The installation wizard welcome screen is displayed.

5. Click **Next** to proceed with the installation.

   If you are installing BusinessObjects Enterprise on Windows XP Service Pack 2 or higher, an Internet Connection Firewall warning message is displayed. Click **OK** to continue.

   The "License Agreement" dialog is displayed.

6. Review the agreement.
7. Select **I accept the License Agreement** and click **Next**.

   The "User Information" screen is displayed.

Related Topics

• *Installation modes*

Entering user information and a product keycode

Use the "User Information" screen to enter user information and provide a keycode for your BusinessObjects Enterprise product.

1. Provide an appropriate user and organization name in the **Full Name** and **Organization** fields.

   The **Organization** field is optional.

2. Enter a valid code in the **Product Keycode** field and click **Next**.

   Valid keycodes are formatted XXXXX-XXXXXXX-XXXXXXX-XXXX.

   The "Choose Language Packs" screen is displayed.

To install Language Packs

You can choose to install specific or all available language packs. These languages can be used by administrators and users in BusinessObjects Enterprise products.

Note:
English is mandatory because it's used as a back-up language if a problem with a language pack is detected. English cannot be deselected.

1. Select the language packs you want to install.

   The language packs currently available for installation include:

   - Chinese Simplified
   - Chinese Traditional
   - Danish
   - Dutch
   - English
   - French
   - German
   - Italian
   - Japanese
   - Korean
   - Norwegian
   - Polish

- Portuguese (Brazil)
- Russian
- Spanish
- Swedish
- Thai

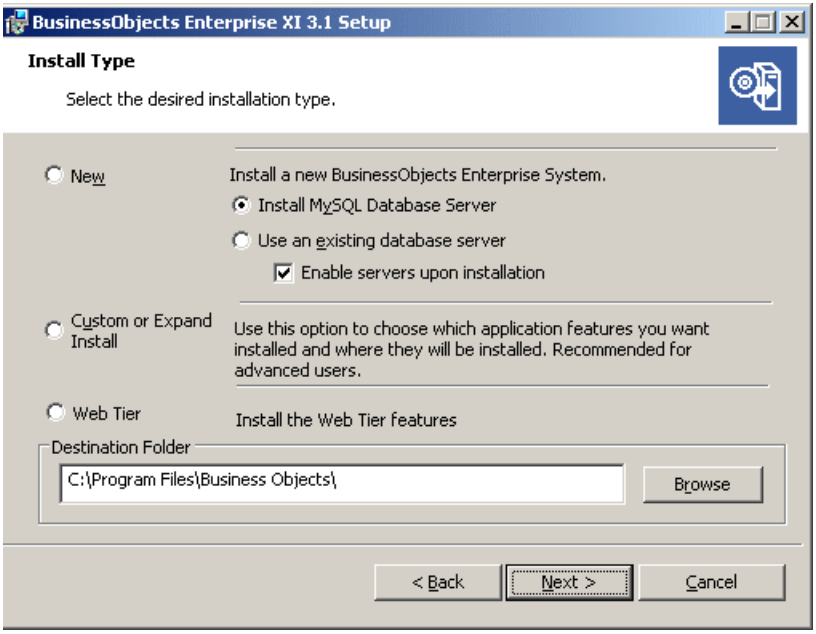
Note:
You can also add language packs after installing BusinessObjects Enterprise.

2. Click **Next**.
   The "Install Type" screen is displayed.

Related Topics
• *Installing language packs*

To select an installation type

The "Install Type" screen is used to select an installation method and to specify an installation directory.



1. Select one of the following installation type options:
   - New

     This option installs all the required BusinessObjects Enterprise server and client components onto your machine.
   - Custom or Expand Install

     This option enables experienced users to pick and choose client and server components to install.
   - Web Tier

     This option installs only web application server components.
2. Specify where to install the BusinessObjects Enterprise components in the **Destination Folder** field.

   If you have Business Objects products installed on your machine, the **Destination Folder** field is disabled and path to the existing Business Objects product folder is displayed.
3. Click **Next** to continue with the installation.

Proceed to the chapter related to the installation type you selected.

Related Topics

- *Installing on a non-system drive*
- *Performing a New installation*
- *Custom or Expand installation*
- *Performing a Web Tier installation*

New Installation

chapter 4

Performing a "New" installation

Performing a "New" installation deploys all of the required and optional components onto one machine.

A "New" installation:

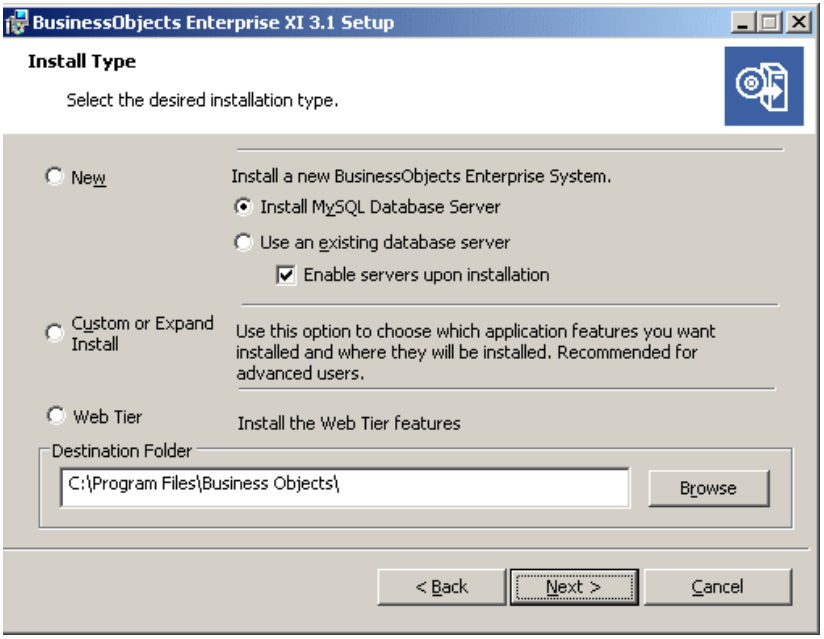
1. Requires you to enter a password to use for the BusinessObjects Enterprise system administrator account.
2. Prompts for system database connection and authentication details. You can choose to install and configure a new MySQL database, or use an existing database.
3. Requires you to enter a name for the Server Intelligence Agent (SIA).
4. Prompts you to choose one of the following installation options:
   - Use a Java web application server. You can choose to install and configure Tomcat, or use an existing Java web application server.
   - Use the IIS web application server included with your Windows operating system.
   - Use both Java and IIS web application servers.

Related Topics

- *To perform a new BusinessObjects Enterprise installation*
- *Beginning your installation*

To perform a new BusinessObjects Enterprise installation

The "Install Type" screen is displayed once you complete the initial set up of the BusinessObjects Enterprise installation.



1. Choose **New** in the "Install Type" screen.
2. Select one of the following options:
   - **Install MySQL Database Server** if you do not have a system database server and want to install MySQL on the current machine.
   - **Use an existing database server** if you want to use an existing database server.
3. Select the **Enable servers upon installation box** if you want to launch BusinessObjects Enterprise when the installation process finishes.
4. Specify where to install the BusinessObjects Enterprise components in the **Destination Folder** field.
5. Click **Next** to continue with the installation.

   The **Server Components Configuration** screen is displayed.

Related Topics

- *To select an installation type*
- *Beginning your installation*

To enter information on your new CMS

The "Server Components Configuration" screen is used to enter the port number and an administrator password for the new Central Management Server (CMS). The CMS manages BusinessObjects Enterprise servers and manages the system and audit databases.

1. Specify a port number in the **CMS port** field.

   The default CMS port number is 6400.

   The CMS will communicate with other BusinessObjects Enterprise servers through the specified port.

2. Specify a password for the CMS administrator account in the **Password** and **Confirm password** fields.

   Tip:
   You can opt to skip this step - select the **Configure the BusinessObjects Enterprise Administrator password at a later time** box.

3. Click **Next** to continue with the installation.

   The "Server Intelligence Agent" screen is displayed.

   Note:
   If the port you specified in step 1 is unavailable, you will be requested to specify another port number.

To enter Server Intelligence Agent information

A Server Intelligence Agent (SIA) node is automatically created during installation of BusinessObjects Enterprise. For more information on Server Intelligence and the Server Intelligence Agent, refer to the *SAP BusinessObjects Enterprise Administrator's Guide*. The "Server Intelligence Agent" screen is used to name and designate a port address for the SIA.

1. Provide a unique name to identify the SIA node in the **Node Name** field.

   Note:
   Do not use spaces or non-alphanumeric characters in a SIA node name.

2. Specify a port number for the SIA in the **Port** field (default is 6410).

This port will be used by the SIA to communicate with the Central Management Server (CMS).

3. Click **Next** to continue with the installation.

   Once the SIA information is entered, the port number will be validated before you can proceed to configure the CMS database for your installation. A warning will display if the port you specified is not available.

Related Topics

- *To configure your MySQL database server*
- *To configure an existing database server*

CMS database configuration

To configure your MySQL database server

The "MySQL Database Server Configuration" screen appears if you chose to install MySQL as part of the BusinessObjects Enterprise installation.

1. Specify the port number for the MySQL database server in the **MySQL Port Number** field.

   The default port number is 3306. Use this number unless the port is unavailable.

2. Specify and confirm a password for the MySQL root user account in the **MySQL root User Account** area.
3. Confirm the username and give a password for the MySQL BusinessObjects database user account in the **MySQL BusinessObjects User Account** area and click **Next**.

   The "Select Web Application Server" screen is displayed.

Related Topics

- *To perform a new BusinessObjects Enterprise installation*
- *To select a web application server configuration option*

To configure an existing database server

The "CMS Database Information" screen appears if you chose to use an existing database server to hold the BusinessObjects Enterprise Central Management Server (CMS) database. Use this screen to enter connection and authentication details for the database.

1. Select a database type from the **Select existing CMS database** drop-down list in the **CMS Database** pane.

   Depending on your database server selection, corresponding input fields are displayed in the **CMS Database** pane.

2. Provide all the required information for the database in the fields provided in the **CMS Database** pane.

   The table below summarizes all the information required for each database type:

Database type	Information required at install time
Microsoft SQL Server (ODBC)	• ODBC DSN (Specified in Control Panel's Data Sources (ODBC) applet)
Oracle	• Server: tnsnames connect identifier • Login credentials
DB2	• Server: DB2 database alias • Login credentials
MySQL	• Database: MySQL database name • Server: MySQL server name • Port: default port is 3306 • Login credentials

Database type	Information required at install time
Sybase	• Server: Sybase Server Name • Login credentials **Note:** The Sybase server name is a combination of the host name and the port number which is set by your database administrator in the file `sql.ini`.

To provide an ODBC DSN for a Microsoft SQL Server:

a. Click the **Browse** button in the **CMS Database** area.
b. Use the "SQL Server Logon" screen to select a data source, database, and to provide user credentials.
c. If you are installing on a 64-bit version of Windows, you have the option to select the **Consume DSN created under WOW64** checkbox.
d. Click **OK** to submit your settings.

   The "SQL Server Logon" screen is closed and an ODBC DSN entry is displayed in the **ODBC DSN** field.

3. Select the **Auditing Database** check-box to set up an existing auditing database. If you do not want to specify an auditing database for your new installation, skip to step 6.

   Note:
   If you do not install an auditing database, you can use the "Add/Remove Programs" applet in the Windows Control Panel to add an auditing database later. Adding an auditing database from the "Add/Remove Programs" applet requires you to configure the auditing database using the Central Configuration Manager (CCM). For information on configuring an auditing database with the CCM, see “Configuring auditing for servers on Windows” in the *SAP BusinessObjects Enterprise Administrator’s Guide*.

   The input fields under the **Auditing Database** box are activated.

4. Select a database type from the **Select existing Auditing database** drop-down list in the **Auditing Database** pane.

   Depending on your database server selection, corresponding input fields are displayed in the **Auditing Database** pane.

5. Provide all the required information for the database in the fields provided in the **Auditing Database** pane.
6. Select the **Reset existing database** box to delete all current tables and entries in existing database CMS and auditing databases.
7. Click **Next** to continue with the installation.

   The "Select Web Application Server" screen is displayed. This screen only displays if a connection is established with the database configuration you provided.

Related Topics

• *To select a web application server configuration option*

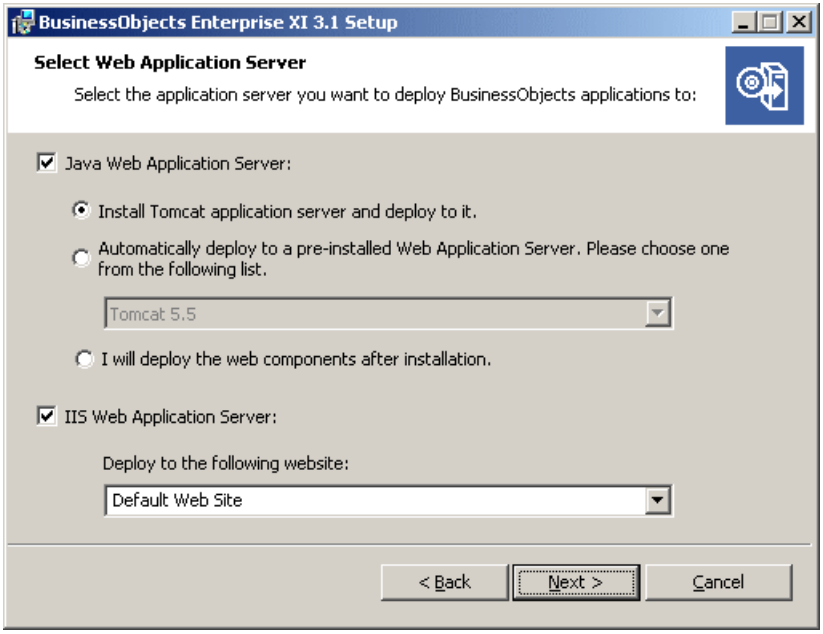
To select a web application server configuration option

The web application server runs Business Objects web applications such as InfoView, the Central Management Console (CMC), and custom web applications. Use the "Select Web Application Server" screen to choose to:

- Install and/or deploy to a Java web application server, such as the Tomcat web application server included with BusinessObjects Enterprise.
- Install and deploy to the IIS web application server installed as part of your Windows operating system.

  Note:

  - If you are using the 64-bit version of IIS 7, you must ensure that:
    - ASP.NET is enabled.
    - The advanced IIS setting **Enable 32-bit Applications** is set to "True".
    - The advanced IIS setting **.NET Application Pool** is set to "Classic" mode.
  - If the **IIS Web Application Server** option is not selectable, ensure that ASP.NET v1.1 and IIS are both installed.



To configure a Java web application server for BusinessObjects Enterprise you will need the web application server administrator account name and password, as well as the listener port number.

1. To use a Java web application server, select **Java Web Application Server** and choose one of the following options:
   - **Install Tomcat application server and deploy to it**. This will automatically install and configure Tomcat.
   - **Automatically deploy to a pre-installed Web Application Server**. This will prompt you to enter the configuration and authentication information on the next screen.
2. To use the IIS web application server included as part of your Windows operating system, choose **IIS Web Application Server**, then select the website to use for deployment from the drop-down list.
3. Click **Next**.

   Depending on your selection, you can now proceed to either configure your web application server, or start the installation process.

To configure a new Tomcat web application server

The "Configure Tomcat" screen displays during installation if you choose to install Tomcat as the web application server for your BusinessObjects Enterprise installation. Use this screen to configure Tomcat.

1. Accept the default values or specify new port numbers for **Connection port**, **Shutdown port**, and **Redirect port**.
2. Click **Next** to continue with the installation.

   Note:
   If the port numbers you specified are in use, a warning message is displayed. To continue you will have to specify unused and valid port numbers.

   The "Start Installation" screen is displayed.

To configure your existing web application server

The "Configure Web Application Server" screen displays during installation after you specify an existing server in the "Select Web Application Server" screen. To properly install web components on your web application server, you must provide specific configuration information about your existing web application server.

Note:
The setup program may not provide the option to perform an automatic deployment of web applications to a supported web application server. Under these circumstances, web applications must be deployed manually, or with the `wdeploy` command-line tool. For information on how to deploy web applications manually or with the `wdeploy` tool, see the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

1. Select your existing web application server from the drop-down list of web application server types.
2. Click **Next** to continue with the installation.

   The following table summarizes the information required for supported web application servers.

Web application server	Information required for installation
Tomcat 5.5	• **Server Instance**: Name of the current web application server instance (for example “localhost”). • **Service Name**: Name of the Windows service if the application server will be installed as a windows service (for example “Tomcat5”). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\wdeploy\appserver\Tomcat5520`).
WebLogic 10	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The WebLogic domain root directory (for example `C:\bea\weblogic10\user_projects\domains\base_domain`).
WebLogic 9.2	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The directory where the web application server is installed (for example `C:\bea\user_projects\domains\base_domain`).
WebSphere 6.1	

Web application server	Information required for installation
	• **SOAP Port**: The SOAP Connector Port of the application server (for example “8880”). • **Username**: User name with administration rights to the WebSphere application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “server1”). • **Virtual Host**: The virtual host to which the application must be bound. • **Admin is Secure?**: Select this option to enable security requiring administrative access credentials to the application. **Note:** Values for the username and password parameters must be set when *Admin is Secure* is enabled. • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\Program Files\IBM\WebSphere\AppServer`).
Oracle Application Server 10g R3	

Web application server	Information required for installation
	• **Admin is Secure?**: Select this option to use Secure Sockets Layer (SSL) encryption for authentication. **Note:** If **Admin is Secure?** is not selected, you will still have to specify the username and password to access the server. • **Port**: Administration port of the application server (for example “6003”). This should be the request port of the `<notification-server>` element in the `opmn.xml` file. • **Username**: User with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the Oracle Application Server application server instance (for example “home”). • Server Name: Name of the target application server (for example, “myserver.domain.com”). • Group Id: Name of the server group to which the target application belongs (for example "Default_group"). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\product\10.1.3\OracleAS_1`).

The "Start Installation" screen is displayed.

Remember your credentials for the web application server as they may be required to install add-ons such as ProcessTracker or additional language packs.

To enter a Web Application Container Server (WACS) HTTP port number

The Web Application Container Server (WACS) is a container that provides Central Management Console (CMC) services for .NET installations. If you are not using a Java web application server in your deployment, the "Web Application Container Server Configuration" screen appears.

This screen allows you to either accept the default HTTP port number, 6405, or to specify a different port. This is the HTTP port number on which you will access the CMC through WACS.

1. If you want to change the HTTP port number for the WACS server, enter a new value in the **HTTP Port** field.
2. Click **Next** to continue.

To start the installation

The "Start Installation" screen is the final screen in the installation.

- Click the **Next** button to start the installation process.

  Note:
  If you ran `setup.exe` from the command line with the `-w [filename]` parameter, this is the point at which you can **Cancel** the installation process, as the `.ini` configuration file has been written.

Custom or Expand Installations

chapter 5

Custom or Expand installation

The "Custom or Expand" option allows you to install individual components. It is recommended that you run this type of installation only after you are familiar with specific BusinessObjects Enterprise components and their roles, otherwise you may inadvertently fail to install a required component.

After setting up one BusinessObjects Enterprise server, you can run a "Custom or Expand" installation on a second machine to add server components, create a CMS cluster, increase available resources, and distribute the processing workload over both machines.

The "Custom or Expand" install features consist of:

- Client Components
- Web Tier Components
- Server Components
- Database Access
- Export Support
- Samples
- Help Files

You may choose to install all, some, or parts of the above components.

Tip:
Consult the “Scaling Your System” section of the *SAP BusinessObjects Enterprise Administrator's Guide* for information on planning how to best expand your installation to meet the needs of your organization.

To select or deselect features

Use the "Select Features" screen to select BusinessObjects Enterprise components when running a "Custom and Expand" installation. All the available features are listed in the feature tree under the **BusinessObjects Enterprise** root node. Each node has a corresponding installation icon.

1. Click and hold the installation icon so select your installation preference:
   - Specify that the selected feature will be installed to the local hard drive.
   - Specify that the selected feature and its subfeatures will be installed on the local hard drive.

- Specify that a selected feature and its subfeatures will not be installed.

Node installation icon	Meaning
	The feature and some subfeatures will be installed on the local hard drive.
	The feature and all subfeatures will be installed on the local hard drive.
	The feature is either unavailable or will not be installed.

a. Click **Disk Cost** to calculate the amount of disk space required for the selected features.

   A separate screen is displayed indicating storage space available on the local machine and mapped network drives. Drives that do not have enough disk space for the currently selected features are highlighted. Click **OK** to return to the "Select Features" screen.

2. Click **Next**.

BusinessObjects Enterprise Client Components

The client components are rich client tools that provide end users with access to BusinessObjects Enterprise server functions. Client component tools are only available for Windows operating systems, but do connect to servers running non-Windows operating systems.

To install client components on a BusinessObjects Enterprise server system, you must use the BusinessObjects Enterprise setup program "Custom or Expand install" option. Do not attempt to install client components on a server system by installing the stand-alone client tool installer, which is intended to install on client systems only. The available tools are:

Client tool	Description
Desktop Intelligence	An integrated query, reporting, and analysis tool to access your organization's data for presentation and analysis in a Desktop Intelligence document.
Web Intelligence Rich Client	Provides business users an interactive and flexible interface for building and analyzing reports from your organization's data over the web, through a secured intra- or extranet.
Data Source Migration Wizard	Migrates reports based on Crystal queries, dictionaries, or InfoViews to BusinessObjects Enterprise.
Business View Manager	Provides relational views of information for creating and modifying Data Connections, Dynamic Data Connections, Data Foundations, Business Elements, or Business Views.
Report Conversion Tool	Converts Desktop Intelligence reports (`.rep` files) to Web Intelligence (`.wid`) format. Converted files can then be published to the Central Management Server (CMS).
Import Wizard	Imports user, group, object, or folder content from previous and current Crystal or BusinessObjects Enterprise deployments.
Publishing Wizard	Publishes and sets properties for multiple reports in BusinessObjects Enterprise.
Query as a Web Service	Creates custom web services for specific queries using Business Objects Web Services.
Universe Builder	Creates universe connections for Web Intelligence and Desktop Intelligence documents.

Client tool	Description
Universe Designer	Provides a graphical interface to select and view tables in a database.
Developer Components	Software Development Kits (SDK) with wizards and templates for integrating BusinessObjects Enterprise functionality into your interactive web applications: • BusinessObjects Enterprise .NET SDK. If the installation program detects the .NET Framework 1.1 or 2.0, it automatically installs the BusinessObjects Enterprise .NET SDK for .NET Framework 1.1 or 2.0. You can also use the BusinessObjects Enterprise XI 3.1 .NET runtime redistributable package to install the BusinessObjects Enterprise .NET SDK for .NET Framework 2.0. • BusinessObjects Enterprise Java SDK. • BusinessObjects Enterprise Web Services SDK.
Translation Manager	Defines translations for multilingual documents and prompts. Supports Universe Designer universes and Web Intelligence documents.

BusinessObjects Enterprise Web Tier Components

The "Web Tier" option installs all of components used by the web application server to run BusinessObjects Enterprise web applications. These components include:

Component	Description
BI Platform Web Components	Used to run BusinessObjects Enterprise applications, including the Central Management Console (CMC), InfoView, Dashboard and Analytics, and Voyager.
BusinessObjects Enterprise Web Services	An implementation of web services that provides an API/WSDL to simplify the process of developing web applications. The Web Services consumer API is provided for both Java and .NET with a full set of documentation and samples.
Tomcat	An open-source, standards-based, Java web application server. If you do not have an existing web application server, you can choose to install Apache Tomcat 5.5.

BusinessObjects Server Components

The following BusinessObjects Enterprise Server Components can be installed by running a "Custom or Expand" installation. For further explanation of what these servers do, please consult the “BusinessObjects Enterprise Architecture” chapter of the *SAP BusinessObjects Enterprise Administrator's Guide*.

- Central Configuration Manager

  This is the application that can be used to start and stop services, such as Tomcat, and the Server Intelligence Agent (SIA).

  When you select the Manage Servers icon on the toolbar you may also start, stop, restart, disable, enable and force termination of the Enterprise servers. This tool is also used after installation to change which data source is used for either the CMS or the auditing database, and to update objects after a migration.

- Mapping Support

  Installs the necessary components for building interactive geographic maps in Crystal Reports.

- Enterprise Servers
  - Central Management Server

  - MySQL Database Server
  - Auditor
- Event Server
- Input File Repository Server
- Output File Repository Server
- Crystal Reports Cache Server
- Crystal Reports Processing Server
- Publication Job Server
- Web Intelligence Processing Server
- Desktop Intelligence Servers
- Adaptive Processing Server
- Crystal Reports Job Server
- Program Job Server
- Destination Job Server
- List of Values Job Server
- Desktop Intelligence Job Server
- Adaptive Job Server
- Report Application Server
- Multi Dimensional Analysis Services Server
- Dashboard and Analytics Servers
- Web Application Container Server (WACS)

Database Access

BusinessObjects Enterprise supports business intelligence gathering from many different databases. The database access feature installs support for access to the following data sources:

- Data Federator
- HP Neoview
- MySQL
- Generic ODBC, JDBC
- Salesforce.com Driver
- Netezza
- Microsoft
- IBM DB2

- IBM Informix (includes Redbrick)
- Progress OpenEdge
- Oracle
- Sybase
- NCRTeradata

Export Support

The Export Support feature provides drivers and files to enable export to a variety of industry standard file formats.

- Character Separated Format (CSV)
- Disk File Destination
- Rich Text Format (RTF)
- Word for Windows Format
- Acrobat PDF Format
- Text Format
- Excel Format
- Crystal Reports Format
- XML Format
- Legacy XML Format

Samples

Select the **Samples** feature to include sample reports in your BusinessObjects Enterprise installation. These reports are found in the Report Samples folder. Included are sample reports for Crystal Reports, a BIAR file that includes Web Intelligence reports as well as the Universe for those sample reports.

Note:
Only English samples will be installed. Samples in other languages can be downloaded from *http://support.businessobjects.com/*.

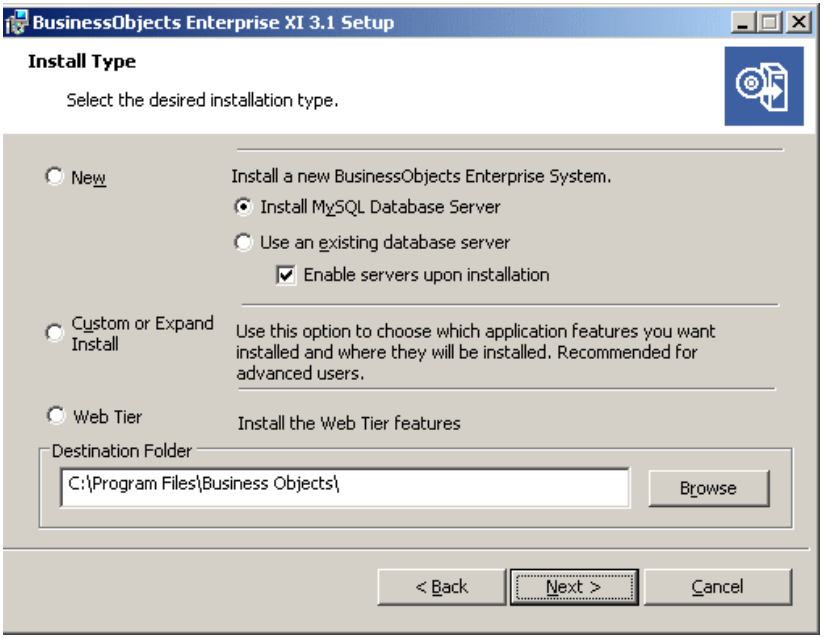
Help Files

Select the **Help files** feature to install the HTML help for the products you are installing including as well as the *SAP BusinessObjects Enterprise Administrator's Guide* and the *SAP BusinessObjects Enterprise InfoView User's Guide*. These guides can be accessed after installation from **Start** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **Documentation**.

Note:
The specific help related to an individual component is bundled with the component. For example, if you install the Publishing Wizard or the Import Wizard you will get the appropriate `.chm` help.

To perform a "Custom or Expand" installation

The "Install Type" screen is displayed after beginning the installation.



1. Choose **Custom or Expand** in the "Install Type" screen.
2. Specify where to install the BusinessObjects Enterprise components in the **Destination Folder** field.
3. Click **Next**.

   The "Select Features" screen is displayed.

Related Topics

- *To select an installation type*
- *To select or deselect features*
- *To install only the server components*
- *Beginning your installation*

To install only the client components

Use the procedure below when running a "Custom or Expand" installation to install BusinessObjects Enterprise client components.

1. Left-click on the icon beside **BusinessObjects Enterprise** in the "Select Features" screen.
2. Select **Entire feature will be unavailable**.

   All the icons under BusinessObjects Enterprise will change to .
3. Left-click on the **Client Components** icon.
4. Select **Entire feature will be installed on local hard drive**.

   The **Client Components** icon will display as .
5. Click **Next** to continue with the installation.

   The installation setup program displays the following error message:

   ```
   You are installing one or more features without any
   Database Access drivers. Without these, installed
   features may
   not function properly. Do you wish to continue?
   ```
6. Click **Yes**.

   The "Start Installation" screen is displayed.
7. Click **Next** to start the installation.

To install only the server components

Use the procedure below to install BusinessObjects Enterprise server components. When you perform this installation, server components are installed, the default user and group accounts are created, and sample reports are published to the system. When the installation is complete, the servers are started.

1. Left-click on the icon beside **Client Components** in the "Select Features" screen and select **Entire feature will be unavailable**.

   The **Client Components** icon changes to

2. Left-click on the icon beside **Web Tier Components** and select **Entire feature will be unavailable**.

   The **Web Tier Components** icon changes to

3. If you want to install MySQL, skip to step 4. Expand **Server Components**.

   Note:
   Do not install MySQL if you want to use an existing database server. Do not install MySQL if you only want to add server components to an existing CMS cluster.

   a. Expand **Central Management Server**.
   b. Left-click on the icon beside **Auditor** and select **Entire Feature will be unavailable**.
   c. Left-click on the icon beside **MySQL** and select **Entire Feature will be unavailable**.

4. Deselect the **Database Access**, **Export Support**, **Samples**, and **Help Files** options if they are not required.
5. Click **Next** to continue with the installation.

   If you chose to install MySQL, enter information on your new CMS. If you chose not to install MySQL you need to specify whether or not this is your first CMS cluster.

Related Topics

- *To enter CMS clustering information*

To enter CMS clustering information

If you chose not to install MySQL, and are installing server components through a "Custom or Expand" installation, you need to provide information in the "CMS Clustering" screen.

1. If this installation is the first CMS in your deployment, select **If 'Yes,' enter the information for the new CMS**. You can now do one of the following.
   - In the fields provided on the right of the screen, enter the CMS port number and administrator password.
   - Select **Configure the BusinessObjects Enterprise Administrator password at a later time**.
2. Select **If 'no,' enter the new CMS port, and details for a CMS with which to cluster** if this server installation is not the first CMS in your deployment. New information entry fields will be displayed on the right side of the screen.
   a. Specify a port number for your new CMS installation.
   b. Provide the CMS hostname, port number, and password for the cluster to which you want to add the CMS of your installation.

   Before proceeding to the next screen, the installation setup program will test connectivity to your existing CMS cluster based on the information you provided.
3. Click Next to continue with the installation.

   The "Server Intelligence Agent" screen is displayed.

Related Topics

- *To enter Server Intelligence Agent information*

To enter information on your new CMS

The "Server Components Configuration" screen is used to enter the port number and an administrator password for the new Central Management Server (CMS). The CMS manages BusinessObjects Enterprise servers and manages the system and audit databases.

1. Specify a port number in the **CMS port** field.

   The default CMS port number is 6400.

The CMS will communicate with other BusinessObjects Enterprise servers through the specified port.

2. Specify a password for the CMS administrator account in the **Password** and **Confirm password** fields.

   Tip:
   You can opt to skip this step - select the **Configure the BusinessObjects Enterprise Administrator password at a later time** box.

3. Click **Next** to continue with the installation.

   The "Server Intelligence Agent" screen is displayed.

   Note:
   If the port you specified in step 1 is unavailable, you will be requested to specify another port number.

To enter Server Intelligence Agent information

A Server Intelligence Agent (SIA) node is automatically created during installation of BusinessObjects Enterprise. For more information on Server Intelligence and the Server Intelligence Agent, refer to the *SAP BusinessObjects Enterprise Administrator's Guide*. The "Server Intelligence Agent" screen is used to name and designate a port address for the SIA.

1. Provide a unique name to identify the SIA node in the **Node Name** field.

   Note:
   Do not use spaces or non-alphanumeric characters in a SIA node name.

2. Specify a port number for the SIA in the **Port** field (default is 6410).

   This port will be used by the SIA to communicate with the Central Management Server (CMS).

3. Click **Next** to continue with the installation.

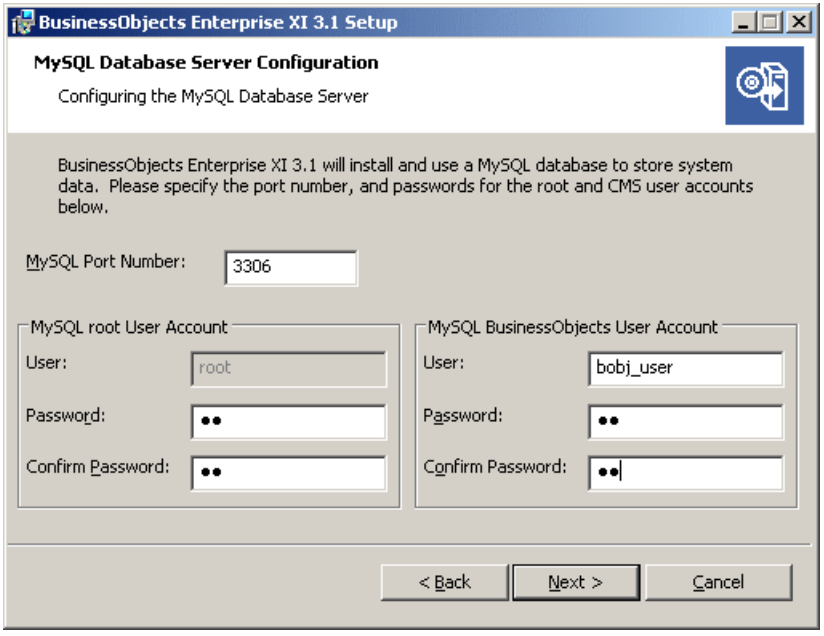
   Once the SIA information is entered, the port number will be validated before you can proceed to configure the CMS database for your installation. A warning will display if the port you specified is not available.

Related Topics

- *To configure your MySQL database server*
- *To configure an existing database server*

To configure your MySQL database server

The "MySQL Database Server Configuration" screen appears if you chose to install MySQL as the database server for your Custom or Expand installation.



1. Specify the port number for the MySQL database server in the **MySQL Port Number** field.

   The default port number is 3306. Use this number unless this port is unavailable.
2. Specify and confirm a password for the MySQL root user account in the **MySQL root User Account** pane.
3. Specify and confirm a password for the MySQL BusinessObjects user account in the **MySQL BusinessObjects User Account** pane.
4. Click **Next** to continue the installation.

   The "Start Installation" screen is displayed.

To configure an existing database server

The "CMS Database Information" screen appears if you chose to use an existing database server as your CMS for your Custom or Expand installation.

1. Select a database type from the **Select existing CMS database** drop-down list in "CMS Database".

   Depending on your database server selection, corresponding input fields are displayed in "CMS Database".

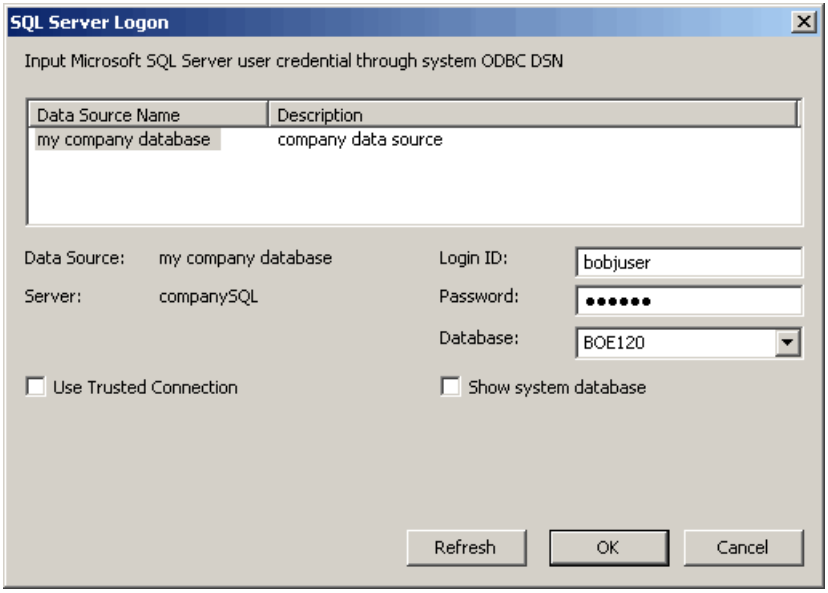
2. Provide all the required information for the database in the fields provided in "CMS Database".

   The table below summarizes all the information required for each database type.

Database type	Information required for installation
MySQL	Data Source Name
Sybase	Sybase Server Name
DB2	DB2 database alias
Oracle	tnsnames connect identifier
Microsoft SQL Server	ODBC DSN

   a. To provide an ODBC DSN for a Microsoft SQL Server, click the **Browse** button in "CMS Database".

      The "SQL Server Logon" screen is displayed.



Note:
If you are running the installation on a Windows 64-bit machine an additional check box - **Consume DSN created under WOW64** - is displayed.

b. Use the "SQL Server Logon" screen to select a data source, database, and to provide user credentials.
c. Click OK to submit your settings.

   The "SQL Server Logon" screen is closed and an ODBC DSN entry is displayed in"CMS Database".

If you do not want to specify an auditing database for your new installation skip to step 6.

3. Select the **Auditing Database** box to specify an auditing database for your new installation.

   The input fields under the **Auditing Database** box are activated.

4. Select a database type from the **Select existing Auditing database** drop-down list in "Auditing Database"

   Depending on your database server selection, corresponding input fields are displayed in "Auditing Database".

5. Provide all the required information for the database in the fields provided in "Auditing Database".

   The table below summarizes all the information required for each database type.

Database type	Information required for installation
MySQL	Data Source Name
Sybase	Sybase Server Name
DB2	DB2 database alias
Oracle	tnsnames connect identifier
Microsoft SQL Server	ODBC DSN

6. Select the **Reset existing database** box to delete all current tables and entries in the existing database.
7. Click **Next** to continue with the installation.

   The "Start Installation" screen is displayed. This screen only displays if a connection is established with the database configuration you provided.

To start the installation

The "Start Installation" screen is the final screen in the installation.

- Click the **Next** button to start the installation process.

  Note:
  If you ran `setup.exe` from the command line with the `-w [filename]` parameter, this is the point at which you can **Cancel** the installation process, as the `.ini` configuration file has been written.

To install only the web tier components

Use the procedure below when running a Custom or Expand installation type to only install the BusinessObjects Enterprise Web Tier Components.

1. Left-click on the icon beside **BusinessObjects Enterprise** in the "Select Features" screen.
2. Select **Entire feature will be unavailable**.

   All the icons under BusinessObjects Enterprise will change to .
3. Left-click on the **Web Tier Components** icon.
4. Select **Will be installed on local hard drive**.

   The **Web Tier Components** icon will display as .
5. If you want to install Apache Tomcat as your web application server skip to step 6. Expand **Web Tier components** if you want to use your existing web application server.
   a. Left-click on the icon beside **Tomcat**.
   b. Select **Entire Feature will be unavailable**.
6. Click **Next** to continue with the installation.

   The "CMS Clustering" screen is displayed.

To specify CMS cluster information

When you only install Web Tier components as part of a custom or expand installation, you need to specify an existing CMS. Use the "CMS Clustering" screen to provide information on CMS to which you want to cluster your web tier components.

1. Enter information on your existing CMS in the fields provided.
   - Existing CMS Hostname
   - Existing CMS Port
   - CMS Administrator Password

   Note:
   The CMS Hostname defaults to your local computer name.
2. Click **Next** to continue.

The installation program will attempt to communicate with your existing CMS cluster using the information you provided.

You now need to configure your web application server.

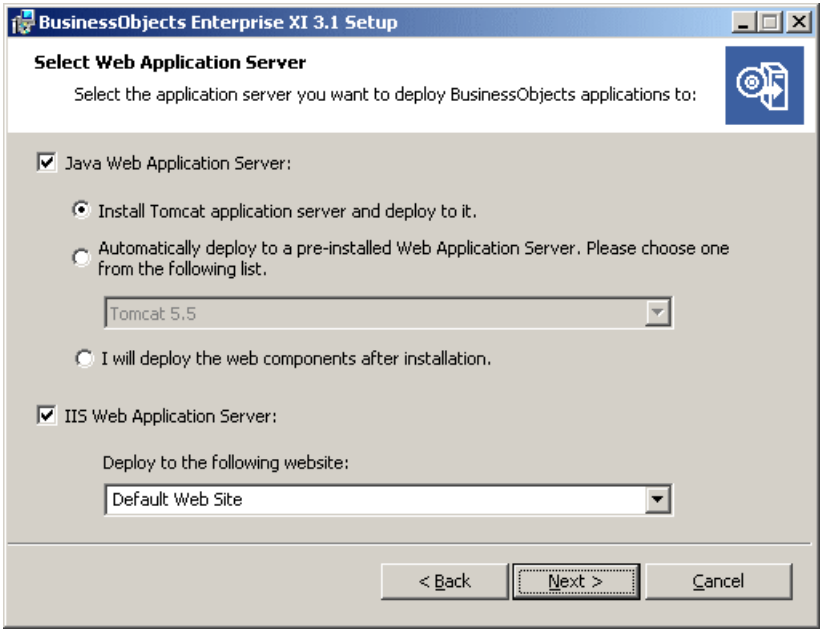
To select a web application server configuration option

The web application server runs Business Objects web applications such as InfoView, the Central Management Console (CMC), and custom web applications. Use the "Select Web Application Server" screen to choose to:

- Install and/or deploy to a Java web application server, such as the Tomcat web application server included with BusinessObjects Enterprise.
- Install and deploy to the IIS web application server installed as part of your Windows operating system.

  Note:

  - If you are using the 64-bit version of IIS 7, you must ensure that:
    - ASP.NET is enabled.
    - The advanced IIS setting **Enable 32-bit Applications** is set to "True".
    - The advanced IIS setting **.NET Application Pool** is set to "Classic" mode.
  - If the **IIS Web Application Server** option is not selectable, ensure that ASP.NET v1.1 and IIS are both installed.



To configure a Java web application server for BusinessObjects Enterprise you will need the web application server administrator account name and password, as well as the listener port number.

1. To use a Java web application server, select **Java Web Application Server** and choose one of the following options:
   - **Install Tomcat application server and deploy to it**. This will automatically install and configure Tomcat.
   - **Automatically deploy to a pre-installed Web Application Server**. This will prompt you to enter the configuration and authentication information on the next screen.
2. To use the IIS web application server included as part of your Windows operating system, choose **IIS Web Application Server**, then select the website to use for deployment from the drop-down list.
3. Click **Next**.

   Depending on your selection, you can now proceed to either configure your web application server, or start the installation process.

To enter a Web Application Container Service (WACS) HTTP port number

A Web Application Container Service (WACS) will automatically be installed if the setup program determines that no Java web application server will be used.

You must enter a port number for the HTTP listener.

- Enter the port number into the HTTP Port field. The default port number is 6405.

  The WACS will listen for HTTP requests on the port you enter.

To configure a new Tomcat web application server

The "Configure Tomcat" screen displays during installation if you choose to install Tomcat as the web application server for your BusinessObjects Enterprise installation. Use this screen to configure Tomcat.

1. Accept the default values or specify new port numbers for **Connection port**, **Shutdown port**, and **Redirect port**.
2. Click **Next** to continue with the installation.

   Note:
   If the port numbers you specified are in use, a warning message is displayed. To continue you will have to specify unused and valid port numbers.

   The "Start Installation" screen is displayed.

To configure your existing web application server

The "Configure Web Application Server" screen displays during installation after you specify an existing server in the "Select Web Application Server" screen. To properly install web components on your web application server, you must provide specific configuration information about your existing web application server.

Note:
The setup program may not provide the option to perform an automatic deployment of web applications to a supported web application server. Under these circumstances, web applications must be deployed manually, or with the `wdeploy` command-line tool. For information on how to deploy web applications manually or with the `wdeploy` tool, see the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

1. Select your existing web application server from the drop-down list of web application server types.
2. Click **Next** to continue with the installation.

   The following table summarizes the information required for supported web application servers.

Web application server	Information required for installation
Tomcat 5.5	• **Server Instance**: Name of the current web application server instance (for example “localhost”). • **Service Name**: Name of the Windows service if the application server will be installed as a windows service (for example “Tomcat5”). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\wdeploy\appserver\Tomcat5520`).
WebLogic 10	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The WebLogic domain root directory (for example `C:\bea\weblogic10\user_projects\domains\base_domain`).
WebLogic 9.2	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The directory where the web application server is installed (for example `C:\bea\user_projects\domains\base_domain`).
WebSphere 6.1	

Web application server	Information required for installation
	• **SOAP Port**: The SOAP Connector Port of the application server (for example “8880”). • **Username**: User name with administration rights to the WebSphere application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “server1”). • **Virtual Host**: The virtual host to which the application must be bound. • **Admin is Secure?**: Select this option to enable security requiring administrative access credentials to the application. **Note:** Values for the username and password parameters must be set when *Admin is Secure* is enabled. • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\Program Files\IBM\WebSphere\AppServer`).
Oracle Application Server 10g R3	

Web application server	Information required for installation
	• **Admin is Secure?**: Select this option to use Secure Sockets Layer (SSL) encryption for authentication. **Note:** If **Admin is Secure?** is not selected, you will still have to specify the username and password to access the server. • **Port**: Administration port of the application server (for example “6003”). This should be the request port of the `<notification-server>` element in the `opmn.xml` file. • **Username**: User with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the Oracle Application Server application server instance (for example “home”). • Server Name: Name of the target application server (for example, “myserver.domain.com”). • Group Id: Name of the server group to which the target application belongs (for example "Default_group"). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\product\10.1.3\OracleAS_1`).

The "Start Installation" screen is displayed.

Remember your credentials for the web application server as they may be required to install add-ons such as ProcessTracker or additional language packs.

To start the installation

The "Start Installation" screen is the final screen in the installation.

- Click the **Next** button to start the installation process.

  Note:
  If you ran `setup.exe` from the command line with the `-w [filename]` parameter, this is the point at which you can **Cancel** the installation process, as the `.ini` configuration file has been written.

Web Applications Installation

chapter 6

Performing a Web Tier installation

The web tier installation type installs the appropriate web application components on the machine running your web application server. You will need user account and port information to configure your web application server through the BusinessObjects Enterprise setup program.

The Java SDK 1.5 is installed by default with a web tier installation.

The web application server processes scripts, communicates with report and cache servers, translates cached files to DHTML, facilitates OLAP view requests and manages session state information for users.

Tip:
If you have not yet installed the server components in your deployment, you will not be able to verify the connectivity for the web applications. It is best practice to install the server and client components to verify connectivity.

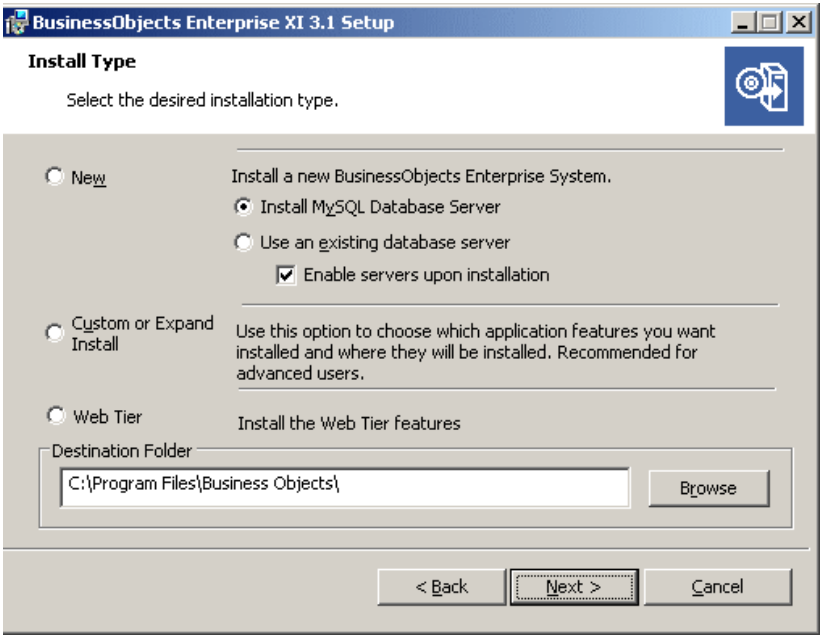
BusinessObjects Enterprise Web Tier Components

The "Web Tier" option installs all of components used by the web application server to run BusinessObjects Enterprise web applications. These components include:

Component	Description
BI Platform Web Components	Used to run BusinessObjects Enterprise applications, including the Central Management Console (CMC), InfoView, Dashboard and Analytics, and Voyager.
BusinessObjects Enterprise Web Services	An implementation of web services that provides an API/WSDL to simplify the process of developing web applications. The Web Services consumer API is provided for both Java and .NET with a full set of documentation and samples.
Tomcat	An open-source, standards-based, Java web application server. If you do not have an existing web application server, you can choose to install Apache Tomcat 5.5.

To perform a Web Tier installation

The "Install Type" screen is displayed once you complete the initial set up of the BusinessObjects Enterprise installation.



1. Choose **Web Tier** in the "Install Type" screen.
2. Specify where to install the BusinessObjects Enterprise components in the **Destination Folder** field.
3. Click **Next** to continue with the installation.

   The "Select Features" screen is displayed.

Related Topics

- *To select an installation type*
- *Beginning your installation*

To select and deselect web tier components

Use the "Select Features" screen to select and deselect web tier components when running a Web Tier installation. All the available web tier components are listed in the feature tree under the **BusinessObjects Enterprise** node. Each feature and subfeature has a corresponding icon.

1. Click the icon for a feature you want to select or deselect.

You can do any of the following:

- Specify that the selected feature will be installed on the local hard drive.
- Specify that the selected feature and its subfeatures will be installed on the local hard drive.
- Specify that a selected feature and its subfeatures will not be installed.

Icon associated with feature	Meaning
	The feature and only the subfeatures you select will be installed on the local hard drive you specified in the Setup program.
	The feature and all its subfeatures will be installed on the local hard drive you specified earlier .
	The feature or subfeature is either unavailable or will not be installed.

a. Click **Disk Cost** to calculate if sufficient disk space is available for your selected features.

   A separate screen is displayed indicating storage space available on the local machine and mapped network drives. Drives that do not have enough disk space for the currently selected features are highlighted. Click **OK** to close to return to the "Select Features" page.

2. Click **Next** to continue with the installation.

   The "CMS Clustering" screen is displayed.

To specify an existing CMS for web tier components

The web tier components need to be associated with an existing Central Management Server. Use the "CMS Clustering" screen to provide information on the CMS that will manage the web tier components you are installing.

1. Specify the host name for the CMS in the **Existing CMS Hostname** field.
2. Specify the port number used to communicate with the CMS in the **Existing CMS Port** field.

   The default port number used by the CMS is 6400.

3. Specify the password used by CMS Administrator in the **CMS Administrator Password** field.
4. Click **Next** to continue with the installation.

   The information on the CMS is verified. Once the verification is complete, the "Select Web Application Server" screen is displayed.

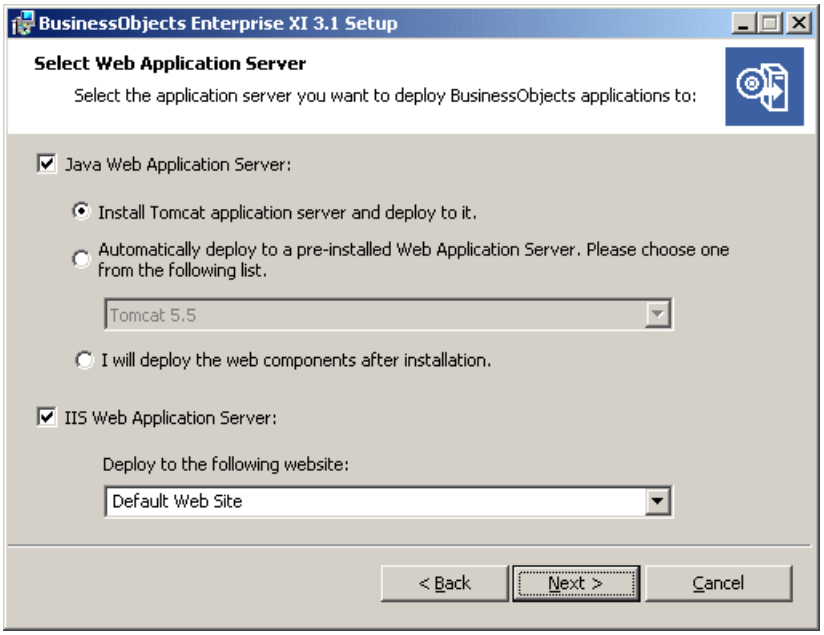
To select a web application server configuration option

The web application server runs Business Objects web applications such as InfoView, the Central Management Console (CMC), and custom web applications. Use the "Select Web Application Server" screen to choose to:

- Install and/or deploy to a Java web application server, such as the Tomcat web application server included with BusinessObjects Enterprise.
- Install and deploy to the IIS web application server installed as part of your Windows operating system.

  Note:

  - If you are using the 64-bit version of IIS 7, you must ensure that:
    - ASP.NET is enabled.
    - The advanced IIS setting **Enable 32-bit Applications** is set to "True".
    - The advanced IIS setting **.NET Application Pool** is set to "Classic" mode.
  - If the **IIS Web Application Server** option is not selectable, ensure that ASP.NET v1.1 and IIS are both installed.



To configure a Java web application server for BusinessObjects Enterprise you will need the web application server administrator account name and password, as well as the listener port number.

1. To use a Java web application server, select **Java Web Application Server** and choose one of the following options:
   - **Install Tomcat application server and deploy to it**. This will automatically install and configure Tomcat.
   - **Automatically deploy to a pre-installed Web Application Server**. This will prompt you to enter the configuration and authentication information on the next screen.
2. To use the IIS web application server included as part of your Windows operating system, choose **IIS Web Application Server**, then select the website to use for deployment from the drop-down list.
3. Click **Next**.

   Depending on your selection, you can now proceed to either configure your web application server, or start the installation process.

To configure a new Tomcat web application server

The "Configure Tomcat" screen displays during installation if you choose to install Tomcat as the web application server for your BusinessObjects Enterprise installation. Use this screen to configure Tomcat.

1. Accept the default values or specify new port numbers for **Connection port**, **Shutdown port**, and **Redirect port**.
2. Click **Next** to continue with the installation.

   Note:
   If the port numbers you specified are in use, a warning message is displayed. To continue you will have to specify unused and valid port numbers.

   The "Start Installation" screen is displayed.

To configure your existing web application server

The "Configure Web Application Server" screen displays during installation after you specify an existing server in the "Select Web Application Server" screen. To properly install web components on your web application server, you must provide specific configuration information about your existing web application server.

Note:
The setup program may not provide the option to perform an automatic deployment of web applications to a supported web application server. Under these circumstances, web applications must be deployed manually, or with the `wdeploy` command-line tool. For information on how to deploy web applications manually or with the `wdeploy` tool, see the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

1. Select your existing web application server from the drop-down list of web application server types.
2. Click **Next** to continue with the installation.

   The following table summarizes the information required for supported web application servers.

Web application server	Information required for installation
Tomcat 5.5	• **Server Instance**: Name of the current web application server instance (for example “localhost”). • **Service Name**: Name of the Windows service if the application server will be installed as a windows service (for example “Tomcat5”). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\wdeploy\appserver\Tomcat5520`).
WebLogic 10	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The WebLogic domain root directory (for example `C:\bea\weblogic10\user_projects\domains\base_domain`).
WebLogic 9.2	• **Port**: Administration port of the application server (for example “7001”). • **Username**: User name with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “mserver1”). • **Application Server Domain Root Directory**: The directory where the web application server is installed (for example `C:\bea\user_projects\domains\base_domain`).
WebSphere 6.1	

Web application server	Information required for installation
	• **SOAP Port**: The SOAP Connector Port of the application server (for example “8880”). • **Username**: User name with administration rights to the WebSphere application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the current web application server instance (for example “server1”). • **Virtual Host**: The virtual host to which the application must be bound. • **Admin is Secure?**: Select this option to enable security requiring administrative access credentials to the application. **Note:** Values for the username and password parameters must be set when *Admin is Secure* is enabled. • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\Program Files\IBM\WebSphere\AppServer`).
Oracle Application Server 10g R3	

Web application server	Information required for installation
	• **Admin is Secure?**: Select this option to use Secure Sockets Layer (SSL) encryption for authentication. **Note:** If **Admin is Secure?** is not selected, you will still have to specify the username and password to access the server. • **Port**: Administration port of the application server (for example “6003”). This should be the request port of the `<notification-server>` element in the `opmn.xml` file. • **Username**: User with administration rights to the application server. • **Password**: Password for account with administration rights to the application server. • **Server Instance**: Name of the Oracle Application Server application server instance (for example “home”). • Server Name: Name of the target application server (for example, “myserver.domain.com”). • Group Id: Name of the server group to which the target application belongs (for example "Default_group"). • **Application Server Installation Directory**: The directory where the web application server is installed (for example `C:\product\10.1.3\OracleAS_1`).

The "Start Installation" screen is displayed.

Remember your credentials for the web application server as they may be required to install add-ons such as ProcessTracker or additional language packs.

To start the installation

The "Start Installation" screen is the final screen in the installation.

- Click the **Next** button to start the installation process.

  Note:
  If you ran `setup.exe` from the command line with the `-w [filename]` parameter, this is the point at which you can **Cancel** the installation process, as the `.ini` configuration file has been written.

Silent Installation

chapter 7

Overview of silent installation

There are two methods for running BusinessObjects Enterprise installations for Windows directly from the command line:

- Silent installation using a response file - referred to as a scripted installation in this guide
- Silent installation specifying parameters directly on the command line

Both methods can be used to automate installations across multiple machines. The scripted installation method requires that you to specify an `.ini` file. The silent installation allows you to specify parameters for running `setup.exe`.

The same parameters are used for both methods. It is recommended that you use the scripted installation method to run custom installations, so that you avoid having to pass a large number of parameter settings directly through the command line.

Note:
If you pass a parameter directly in the command line, the setting will override any setting specified in the `.ini` file.

These installation methods are particularly useful when you need to quickly perform multiple installations. You can also integrate the scripts and commands into your own installation scripts.

Silent installations include a series of parameters including installation settings and directory paths to system resources. You can also specify settings that control the level of prompts during an installation.

Note:
BusinessObjects Enterprise does not support silent installations when the install contents are on multiple DVDs. If your install is on multiple DVDs, you must first copy the contents from all the DVDs to a central location, such as the local hard-drive, and then run the silent install from the location that contains the content from all the DVDs.

Related Topics

• *To create an installation .ini file*
• *Silent installation parameters*

Specific .ini file parameters for setup.exe

There are three parameters used in conjunction with the `.ini` file than can be used when running `setup.exe` on the command line.

Parameter	Description
`-w <PATH\CONFIGURATION_FILE .ini>`	Writes all the installation settings to an `.ini` file to the specified filepath. If a filepath is not specified, the file is stored in the system default `%TEMP%` folder.
`-r <PATH\CONFIGURATION_FILE .ini`	Reads the specified `.ini` file and passes the settings to the installer as settings. **Note:** If you pass a parameter directly in the command line, the setting will override any setting specified in the `.ini` file.
`-l <PATH\CONFIGURATION_FILE.ini`	Creates an installation log file in the specified filepath. If a filepath is not specified, the system default `%TEMP%` folder is used. This parameter can only be used if `-r` is also specified.

Related Topics

- *Silent installation parameters*

To create an installation .ini file

You need to access the directory containing the `setup.exe` file.

1. Open a command line console.
2. Change directories to the folder containing the BusinessObjects Enterprise `setup.exe`.
3. In the command-line type the following:

```
setup.exe -w <PATH>\<FILENAME.ini>
```

4. Press Enter to launch the installation program.
5. Follow the on-screen instructions to enter your preferred installation settings until you reach the final screen of the setup program.

   These settings are recorded in the response file.
6. Click **Cancel** to abort the installation.

User-defined and default parameters from installation setup are written to the `.ini` file , which is stored in the directory specified in step 3.

Note:
If a path is not specified, the file is stored in the current working directory.

Related Topics

- *To create an installation .ini file*
- *Silent installation parameters*

Sample .ini file

The following example installation .ini file was generated for a new BusinessObjects Enterprise installation in which MySQL and Tomcat were selected. The French language pack was added to the English default.

```
[OTHER]
[OTHER]
QUIET=/qa
[INSTALL]
ALLUSERS="1"
AS_ADMIN_IS_SECURE=""
AS_ADMIN_PASSWORD=""
AS_ADMIN_PORT="8080"
AS_ADMIN_USERNAME="admin"
AS_DIR="C:\Program Files\Business Objects\Tomcat55"
AS_INSTANCE="localhost"
AS_SERVER="tomcat55"
AS_SERVICE_NAME="BOE120Tomcat"
AS_VIRTUAL_HOST=""
ApplicationUsers="AllUsers"
CADNODE="BUSINESSABCDEF"
CADPORT="6410"
CLIENTAUDITINGPORT="6420"
CLIENTLANGUAGE="EN"
CLUSTERCMS="False"
```

```
CMSPASSWORD=""
COMPANYNAME=""
DATABASEAUDITDRIVER="MySQLDatabaseSubSystem"
DATABASECONNECT=""
DATABASEDB="BOE120"
DATABASEDB_AUDIT="BOE120_AUDIT"
DATABASEDRIVER="MySQLDatabaseSubSystem"
DATABASEDSN="Business Objects CMS"
DATABASEDSN_AUDIT="Business Objects Audit Server"
DATABASENWLAYER_AUDIT="ODBC"
DATABASEPORT="3306"
DATABASEPORT_AUDIT="3306"
DATABASEPWD="password1"
DATABASEPWD_AUDIT="password1"
DATABASEPWD_MYSQLROOT="password1"
DATABASERDMS_AUDIT="MySQL 5"
DATABASESERVER_AUDIT="localhost"
DATABASEUID="sa"
DATABASEUID_AUDIT="sa"
DATABASE_AUDIT_CONNSVR="connsvr"
ENABLELOGFILE="1"
ENABLESERVERS="1"
INSTALL.LP.EN.SELECTED="1"
INSTALL.LP.FR.SELECTED="1"
INSTALLDBTYPE="SQL"
INSTALLDIR="C:\Program Files\Business Objects\"
INSTALLLEVEL="6"
INSTALLMODE="New"
INSTALLSWITCH="Server"
INSTALL_DB_TYPE="InstallMySQL"
MYSQLPORT="3306"
MYSQL_REMOTE_ACCESS=""
NEWCMSPASSWORD="password1"
NSPORT="6400"
PIDKEY="XXXXX-XXXXXXX-XXXXXXX-XXXX"
Privileged="1"
SINGLESERVER=""
SKIP_DEPLOYMENT=""
TOMCAT_CONNECTION_PORT="8080"
TOMCAT_REDIRECT_PORT="8443"
TOMCAT_SHUTDOWN_PORT="8005"
USERNAME="Business Objects"
WCADOTNETINSTALL="False"
WCAEXISTINGINSTALL="False"
WCAJAVAINSTALL="True"
WCATOMCATINSTALL="True"
WDEPLOY_LANGUAGES="en,fr"
WDEPLOY_LATER=""
WEBSITE_METABASE_NUMBER="1"
```

```
WEBSITE_NAME=""
WEBSITE_PORT="80"
[FEATURES]
REMOVE="WCADotNet,WebApplicationContainer"
ADDLOCAL="Tomcat,Universe,qaaws,Complete,DotNETSDK,Dot
NET2SDK,ImportWizard,VSDesigner,AlwaysInstall,BeforeIn
stall,VBA62,Reporter,Clients,WRC,DataSourceMigrationWiz
ard,CrystalBVM,MetaDataDesigner,ConversionTool,PubWiz,De
signer,DotNetRASSDK,DotNetViewersSDK,VSHELP,RenetSDK,De
velopersFiles,JavaRASSDK,BOEJavaSDK,JavaViewersSDK,Re
beanSDK,WebServicesSDK,UnivTransMgr,wdeploy,BIPWeb
Comp,WebTierComp,BOEWebServices,CCM,ServerComponents,Map
ping,Repository,CRPE,MetaData,CMS,Auditor,MySQL,EventServ
er,InputFRS,OutputFRS,CacheServer,PageServer,Publication
Server,DotNETOnly,ReportAppServer,MDASS,CRJobServ
er,DestJobServer,LOVJobServer,DeskIJobServer,ProgramJob
Server,WebIJobServer,AdaptiveJobServer,PublishingSer
vice,AdaptiveProcessingServer,SearchingService,CrystalRe
portDataProvider,AuditProxyService,Webi,RAS21,DAS,AuditRp
tUnvEN,DADataFederator,DataAccess,HPNeoview,OLAP,My
Cube,SOFA,DAMySQL,DAGenericOD
BC,SFORCE,XML,BDE,dBase,FileSystem,DANETEZZA,DAMi
crosoft,DAIBMDB2,IBM,Redbrick,DAIBMInformix,OLE_DB_Da
ta,DAProgressOpenEdge,DAOracle,SybaseAnywhere,DASy
base,SybaseASE,SybaseIQ,SymantecACT,DANCRTeradata,Text
DA,Btrieve,CharacterSeparated,ExportSupport,ExpDisk
File,ExpRichTextFormat,ExpWordforWindows,PDF,ExpText,Ex
pExcel,ExpCrystalReports,XMLExport,LegacyXMLExport,Sam
plesEN,UserHelp,LanguagePackCostingFeatureen,LanguagePack
CostingFeature"
ADDSOURCE=""
ADVERTISE=""
```

This script can now be used for future silent installations by including the file name and path in the command line as shown below:

```
setup.exe -r FILEPATH
```

Silent installation parameters

The following table lists common parameters that are used for both silent and scripted installations of BusinessObjects Enterprise on Windows.

Caution:
If you pass a parameter directly in the command line, the setting will override any setting specified in the `.ini` file.

Parameter	Description
/qn	Specifies not to prompt during or after the installation. **Note:** You must also enter the CLIENTLANGUAGE parameter as part of your silent install string or the language selection screen will appear at the beginning of your install.
/qn+	Specifies to prompt when the installation is complete. **Note:** You must also enter the CLIENTLANGUAGE parameter as part of your silent install string or the language selection screen will appear at the beginning of your install.
AS_ADMIN_IS_SECURE	Specifies that an administrator credential must be passed to access the web application server. This setting only valid for WebSphere 6 and Oracle. `AS_ADMIN_IS_SECURE="true"`
AS_ADMIN_PASSWORD	Password used by the administrator account to access the web application server. `AS_ADMIN_PASSWORD="pass"`
AS_ADMIN_PORT	Specifies the port used by the web application server. `AS_ADMIN_PORT="8080"`
AS_ADMIN_USERNAME	Specifies the account name used by the administrator to access the web application server. `AS_ADMIN_USERNAME="admin"`
AS_DIR	Specifies the installation directory for the web application server. `AS_DIR="<INSTALLDIR>/Tomcat55"`

Parameter	Description
AS_INSTANCE	Specifies the name of the current web application server instance. `AS_INSTANCE="localhost"`
AS_SERVER	Jave web application server: • Use tomcat55 for Tomcat • Use oas1013 for Oracle Application Server 10g R3 • Use weblogic9 for WebLogic 9 • Use weblogic10 for WebLogic 10 • Use websphere6 for WebSphere 6.1 `AS_SERVER="tomcat55"` **Note:** This parameter is blank when installing to a .NET web application server.
AS_SERVICE_NAME	Specifies the name of the Windows service if the application server will be installed as a service on Windows. `AS_SERVICE_NAME="BOE120Tomcat"`
AS_VIRTUAL_HOST	Specifies virtual host to which the application must be bound. `AS_VIRTUAL_HOST="hostname"`
CADNODE	Specifies the node name for the Server Intelligence Agent. `CADNODE="SIA1"` **Note:** Do not use spaces or non-alphanumeric characters in a SIA node name.
CADPORT	Specifies the port used by Server Intelligence Agent. `CADPORT="6410"`

Parameter	Description
CLIENTLANGUAGE	Specifies the language used by the installer: • en=English • chs=Simplified Chinese • cht=Traditional Chinese • de=German • es=Spanish • ko=Korean • nl=Dutch • jp=Japanese • pt=Portuguese • sv=Swedish • ru=Russian • fr=French • it=Italian • th=Thai • pl=Polish • da=Danish • no=Norwegian • sv=Swedish • pt=Portuguese **Note:** If this parameter not specified, you will be prompted to select a language when the installation begins. `CLIENTLANGUAGE="EN"`
CLUSTERCMS	Specifies if you are adding servers to an existing CMS. To change this setting, it is recommended that you create a new `.ini` file. `CLUSTERCMS="False"`
CMSPASSWORD	Specifies the administrator password for an existing CMS to use in either a custom or web tier installation. `CMSPASSWORD="password"`

Parameter	Description
COMPANYNAME	The company name specified when setting user credentials in the installation. `COMPANYNAME="MyCompanyName"`
DATABASEAUDITINGDRIVER	Specifies which driver to use for the auditing database. To change this setting, it is recommended that you create a new ini file. `DATABASEAUDITDRIVER="MySQLDatabaseSubSystem"`
DATABASEDB	Name of the CMS database on the database server. `DATABASEDB="BOE120"`
DATABASEDB_AUDIT	Name of the auditing database on the database server. `DATABASEDB_AUDIT="BOE120_AUDIT"`
DATABASEDRIVER	Specifies which driver to use for the CMS database.To change this setting, it is recommended that you create a new ini file. `DATABASEDRIVER="MySQLDatabaseSubSystem"`
DATABASEDSN	Specifies the ODBC connection to connect to the CMS database. `DATABASEDSN="Business Objects CMS"`
DATABASEDSN_AUDIT	Specifies the ODBC connection to connect to the auditing database. `DATABASEDSN_AUDIT="Business Objects Audit Server"`
DATABASENWLAYER_AUDIT	Specifies auditing database type. To change this setting, it is recommended that you create a new ini file. `DATABASENWLAYER_AUDIT="ODBC"`

Parameter	Description
DATABASEPWD	Specifies the password used to access the database server. `DATABASEPWD="password"`
DATABASEPWD_AUDIT	Specifies the password used to access the auditing database server. `DATABASEPWD_AUDIT="password"`
DATABASEPWD_MYSQLROOT	The password used by the root account to access if you are installing the MySQL database server. `DATABASEPWD_MYSQLROOT="password"`
DATABASERDMS_AUDIT	Specifies the auditing database type. To change this setting, it is recommended that you create a new ini file. `DATABASERDMS_AUDIT="MySQL 5"`
DATABASESERVER	Specifies the CMS database server name. `DATABASESERVER="localhost"`
DATABASESERVER_AUDIT	Specifies the auditing database server name. `DATABASESERVER_AUDIT="localhost"`
DATABASEUID	Specifies the username used to access the CMS database. `DATABASEUID="servername"`
DATABASEUID_AUDIT	Specifies the username used to access the auditing database. `DATABASEUID_AUDIT="auditname"`
ENABLELOGFILE	Specifies if a log file will be created for the installation. `ENABLELOGFILE="1"`

Parameter	Description
ENABLESERVERS	Specifies if servers should be enabled once the installation is complete. `ENABLESERVERS="1"`

INSTALL.LP.<LANGUAGE_CODE>.SELECTED	Specifies which language pack to install. The following options are available :
	• en=English
	• chs=Simplified Chinese
	• cht=Traditional Chinese
	• de=German
	• es=Spanish
	• ko=Korean
	• nl=Dutch
	• jp=Japanese
	• pt=Portuguese
	• sv=Swedish
	• ru=Russian
	• fr=French
	• it=Italian
	• th=Thai
	• pl=Polish
	• da=Danish
	• no=Norwegian
	• sv=Swedish
	• pt=Portuguese
	Note:
	The English language pack is always selected by default.
	
	`INSTALL.LP.EN.SELECTED="1"`
	`INSTALL.LP.JA.SELECTED="1"`

INSTALLDIR	Specifies the directory where you want to install the BusinessObjects Enterprise components. `INSTALLDIR="C:\Program Files\Business Objects\"`

Parameter	Description
INSTALLMODE	Specifies the installation method from one of the following options: • New • Custom • WebTier `INSTALLMODE="New"`
MYSQLPORT	Specifies the port if you are installing the MySQL database server. `MYSQLPORT="3306"`
MYSQL_REMOTE_ACCESS	Specifies to enable remote access if you are installing the MySQL database server. `MYSQL_REMOTE_ACCESS="1"`
NSPORT	Specifies the port used by the CMS. `NSPORT="6400"`
PIDKEY	Specifies your product license key code. `PIDKEY="xxxxx-xxxxxx-xxxxxx-xxxx"`
TOMCAT_CONNECTION_PORT	Specifies the port number that Tomcat uses to connect. `TOMCAT_CONNECTION_PORT="8080"`
TOMCAT_REDIRECT_PORT	Specifies the port number that Tomcat uses to redirect. `TOMCAT_REDIRECT_PORT="8443"`
TOMCAT_SHUTDOWN_PORT	Specifies the port number that Tomcat uses to shut down `TOMCAT_SHUTDOWN_PORT="8005"`

Parameter	Description
USERNAME	The username specified in the installation when providing the license key code . `USERNAME="Licensed User"`
WCADOT-NETINSTALL	Option to install .NET web application components to the IIS web application server. `WCADOTNETINSTALL="True"`
WDEPLOY_LATER	Specifies not to automatically deploy the web application on the target web application server. This is an automatically generated parameter that should not be modified. `WDEPLOY_LATER="1"`

Parameter	Description
WEBSITE_NAME	Specifies the name of the IIS web site. `WEBSITE_NAME="Default Web Site"`

REMOVE	Specifies which client, server, web tier, and other BusinessObjects Enterprise components will not be installed. To change this setting, it is recommended that you create a new ini file.
	
	`REMOVE="Tomcat,BIPWebComp,Designer,Reporter,Clients,WRC,`
	`DataSourceMigrationWizard,MetaDataDesigner,ConversionTool,ImportWizard,`
	`PubWiz,qaaws,BOEJavaSDK,DevelopersFiles,WebServicesSDK,UnivTransMgr,`
	`WebTierComp,BOEWebServices"`

ADDLOCAL	Specifies which client, server, web tier, and other BusinessObjects Enterprise components will be installed. To change this setting, it is recommended that you create a new ini file.
	
	`ADDLOCAL="Tomcat,Universe,Complete,BIPWebComp,Designer,AlwaysInstall,`
	`BeforeInstall,VBA62,Reporter,Clients,WRC,DataSourceMigrationWizard,`
	`CrystalBVM,MetaDataDesigner,ConversionTool,ImportWizard,PubWiz,qaaws,`
	`JavaRASSDK,BOEJavaSDK,JavaViewersSDK,RebeanSDK,DevelopersFiles,`
	`WebServicesSDK,UnivTransMgr,wdeploy,WebTierComp,BOEWebServices,`
	`CCM,ServerComponents,Mapping,Repository,CRPE,MetaData,CMS,Auditor"`

Other automatically generated parameters

The following parameters are automatically generated parameters and should not be modified.

Parameter name
DATABASECONNECT
DATABASE_AUDIT_CONNSVR
INSTALLDBTYPE
INSTALL_DB_TYPE
INSTALLLEVEL
INSTALLSWITCH
NEWCMSPASSWORD
Privileged
SINGLESERVER
SKIP_DEPLOYMENT
WCADOTNETINSTALL
WCAJAVAINSTALL
WCATOMCATINSTALL
WDEPLOY_LANGUAGES
WEBSITE_METABASE_NUMBER
WEBSITE_PORT
ADDSOURCE
ADVERTISE

Related Topics

- *To create an installation .ini file*

After Installing BusinessObjects Enterprise

chapter 8

Launching the Central Management Console (CMC)

The BusinessObjects Enterprise Central Management Console (CMC) Logon screen appears if you selected the **Launch BusinessObjects Administration Console** option on the last screen of the installation program.

You can also launch the CMC by going to:**Start** > **Programs** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **BusinessObjects Enterprise Central Management Console**.

It is recommended that you verify your installation by logging into the CMC. Once you access the CMC you can create users and groups, set up security policies, and define rights. For more information on using the CMC, see the *SAP BusinessObjects Enterprise Administrator's Guide*.

To log on to the CMC

1. Type the name of your Central Management Server (CMS) and the port number in the **System** field.
2. Type your **User Name** and **Password**.

   If you are using LDAP or Windows NT authentication, you can log on using an account that has been mapped to the BusinessObjects EnterpriseAdministrators group.

   Note:
   If this is the first time an administrator from your organization is accessing the CMC, type “Administrator” as the **User Name**. This Enterprise account by default does not have a password unless you specified one during installation.

3. Select **Enterprise** in the **Authentication Type** list.

   Windows AD, Windows NT, and LDAP authentication also appear in the list; however, third-party user accounts and groups must be mapped to BusinessObjects Enterprise before you can use these types of authentication.

4. Click **Log On**.

   The CMC Home page is displayed.

Troubleshooting CMC logon issues

If you are unable to log on to the CMC, consider the following solutions:

1. Did you provide the correct name for the Central Management Server in the **System** field?
2. Did you provide the correct user credentials in the **User Name** and **Password** fields?
3. Is the correct method specified in the **Authentication** field?
4. Check if the Server Intelligence Agent (SIA) is running. Go to **Start** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **Central Configuration Manager**. If the SIA is not running, start or enable it.
5. If you did not install MySQL as part of your installation, use the database client to connect to the database server. See your database documentation for more information.
6. Are you attempting to connect to a CMS cluster using the @<clustername> format? If this is your first attempt to connect to this cluster, the CMC will not know which CMS servers belong to the cluster. In this case, you need to specify a list of CMS servers in the `web.xml` which is found in the `WEB-INF` folder of the CMC web application WAR file. Follow the instructions in the `cms.clusters` section of the `web.xml file` for more details. It is also possible to specify CMS cluster information for the InfoView by modifying its corresponding `web.xml` file.
7. Go to **Start** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **Diagnostic Tool**. Run the tool to verify your deployment.

If none of these solutions work, consider repairing or reinstalling BusinessObjects Enterprise.

Related Topics

- *To run diagnostic tests in Windows*

Register your installed product

After installing BusinessObjects Enterprise, you can register your product. Your installation on Windows includes the Business Objects Registration Wizard, a tool designed to ease the process of obtaining registration credentials.

Once registered, you can access Business Objects support programs and services. The Registration Wizard also provides links for resources to help you evaluate or purchase Business Objects products.

To access the wizard, go to**Start** > **Programs** > **BusinessObjects** > **Registration Wizard**.

Language Packs

chapter 9

About language packs

A language pack is a resource package that gives a BusinessObjects Enterprise system the ability to interact with users in a specific language. An individual language is known as a locale.

You can install as many different language packs as you want. The default language pack, English, is always installed.

English language fall-back

In the event of a localization error, such as a missing, corrupted, or uninstalled language pack, BusinessObjects Enterprise products fall back to using the default English language. If a preferred language has not been set in the Product Locale drop-down, BusinessObjects Enterprise defaults to using the locale of the installed operating system. If a language pack corresponding to the locale of the operating system is not found, the default English is used.

Product locale changes

Product Locale changes are immediately reflected in the current product's interface, reports, and help. Where multiple client applications are installed, the selected **Product Locale** is only displayed when client is next started. For example, setting the Crystal Report Designer product locale to Japanese will cause the Business Intelligence Modeler client to also display in Japanese. However, if the Business Intelligence Modeler is running at the time of the change, it must be restarted in order for the change to take effect.

Installing language packs with complex deployments

If your organization uses a BusinessObjects Enterprise deployment with more than one server, you will need to deploy language packs to each server individually.

Installing language packs

Language packs can be installed either during the initial installation of BusinessObjects Enterprise, or post-install using a dedicated language pack installer. The installer is a single executable that adds the localized language resources to your Business Objects software deployment.

English is the default option during the installation of BusinessObjects Enterprise, but administrators can opt to install any or all of the other available languages. Additional languages can also be installed onto an existing system by downloading the appropriate language pack from the Business Objects support web site at *http://technicalsupport.businessobjects.com*.

In the event of an operational problem with a language pack, BusinessObjects Enterprise will default back to English localization. Because of this fall-back system, English cannot be deselected as an installable option during the installation of BusinessObjects Enterprise.

Note:
An error message will be displayed if a language pack detects that it is incompatible with a previously installed version of BusinessObjects Enterprise.

Locating language packs

Language packs can be found in the `langs` folder of the BusinessObjects Enterprise for Windows distribution package.

Alternatively, language packs can be downloaded from the Business Objects technical support site at *http://technicalsupport.businessobjects.com*.

To install language packs

Before installing a language pack, your BusinessObjects Enterprise server must be running and patched to the required revision level.

Note:
If you are using Tomcat as you web application server, ensure that Tomcat is shut down before installing language packs.

You will be asked for CMS administrator credentials. If any part of your BusinessObjects Enterprise deployment is not patched to the required software version, the language pack installation will abort and must be reapplied after the system has been patched to the correct level. Please review the requirements for language packs at the Business Objects customer support site: *http://support.businessobjects.com/documentation/supported_platforms*.

Note:
Language packs do not require a keycode.

1. Open the Central Management Console (CMC) and ensure that the server processes are running.
2. Locate the language pack to install under *BUSINESS_OBJECTS_INSTALL_CD_DIR*\langs*LANGUAGE*\.
3. Run the `setup.exe` installer.

   Replace *LANGUAGE* with the ISO code of the language you are installing.

   The Microsoft Windows installer will search for all installed Business Objects applications.
4. Click **Next**.
5. Check **I accept the License Agreement**, and then click **Next**.
6. Enter values for the **CMS**, **CMS Port**, **User Name**, **Password**, and **Authentication** fields. Click **Next.**
7. Enter values for the **Port**, **Username**, **Password**, **Server Instance**, and **Virtual Host**, and **Application Server Installation Directory** fields. If your web application server uses a password for the administrator account, select the **Admin is Secure** check-box. Click **Next.**
8. Click **Next** to begin the installation.

   The language pack will now begin the installation process.

Once the installation is complete, you will be able to choose the installed language from the **Options** dialog window in BusinessObjects Enterprise applications.

Note:

- All fix packs or other updates to BusinessObjects Enterprise released on a date after the language pack release date must be re-applied to ensure that updated functionality is maintained.
- Language packs must be re-installed after you have added or removed a component from your BusinessObjects Enterprise deployment.

Installing language packs across a BusinessObjects Enterprise deployment

You can install language packs with one command by specifying parameters on the command-line. This is referred to as a “silent” installation. When parameters are supplied on the command-line the installation will not prompt for information.

The command-line syntax for a silent install is as follows:

```
setup.exe BUSINESS_OBJECTS_HOME_DIR
  INSTALLMODE=silent
  CMSNAMESERVER=CMS_HOSTNAME
  CMSPORTNUMBER=PORT_NUMBER
  CMSPASSWORD=CMS_PASSWORD
```

BUSINESS_OBJECTS_HOME_DIR with the full path of your BusinessObjects Enterprise installation. The following table details each of the other parameters used by `setup.exe`.

Parameter	Expected argument	Description
INSTALLMODE	“silent”	Switch to enable silent install mode
CMSNAMESERVER	CMS Hostname	Enter the name of your CMS machine.
CMSPORTNUMBER	Port number for CMS	CMS port number.
CMSPASSWORD	CMS admin password	The password for your CMS server.

For example:

```
setup.exe
    "C:\Program Files\Business Objects\BusinessObjects
Enterprise 12.0"
    INSTALLMODE=silent
    CMSNAMESERVER=myserver1
```

```
    CMSPORTNUMBER=6400
    CMSPASSWORD=mypassword
```

To uninstall language packs in silent mode, use the `wdeploy undeployall` command to remove all web applications, then `wdeploy deployall` to re-deploy web applications without the language packs.

For example, the following command runs undeployall for a WebLogic 10 server:

```
wdeploy.bat weblogic10
  -Das_dir=C:\bea\user_projects\domains\base_domain
  -Das_admin_port=7001
  -Das_instance=AdminServer
  -Das_admin_username=weblogic
  -Das_admin_password=weblogic
  undeployall
```

Followed by:

```
wdeploy.bat weblogic10
  -Das_dir=C:\bea\user_projects\domains\base_domain
  -Das_admin_port=7001
  -Das_instance=AdminServer
  -Das_admin_username=weblogic
  -Das_admin_password=weblogic
  deployall
```

For more information on using wdeploy, see *How to use wdeploy*.

Selecting a language

Once installed, BusinessObjects Enterprise products detect the existence of the language pack, and users can choose a language from a list of installed languages found in the **Product Locale** drop-down list of the **CMC Preferences** section of the CMC Preferences, or under the **Options** dialog box on the toolbar or application menu in other BusinessObjects Enterprise products. Command-line utilities use the **LANG** environment variable to determine which language to use.

Each language listed in the **Product Locale** drop-down is displayed in its native localization, rather than the currently employed language. For example, the German language pack is always displayed as *Deutsch*, rather than as *German* in English or *Allemand* in French.

Note:
Application shortcut keys are language neutral and do not change, regardless of which language is in use. For example, Ctrl+S is always mapped to the **Save** command, regardless of the localized name for the **Save** function.

To uninstall language packs

1. Open the Central Management Server (CMS) and ensure that all servers are running.
2. In Windows, click **Start**, point to **Settings**, and then select **Control Panel**.
3. Double-click **Add/Remove Programs**.
4. Select the **BusinessObjects Enterprise Language Pack** to remove and click **Remove**.

   The "Add/Remove Programs" prompts you to confirm that you want to remove the language pack from your computer.
5. Click **Yes**.

   The appropriate files are removed and the necessary configuration is completed.
6. Click **Finish**.

   The language pack has been uninstalled and you are returned to the "Add/Remove Programs" list.
7. After language packs are uninstalled, any affected web applications (web applications that used the language packs) must be redeployed to the web application server. For more information, see the “Deploying with wdeploy” section of the *SAP BusinessObjects Enterprise Web Application Deployment Guide*.

   Note:
   Web applications that are not redeployed will contain the previously installed language(s) until they are redeployed.

Client Tools Installation

chapter 10

Overview of Client Tools installation

BusinessObjects Enterprise client applications are available for installation through a separate installation program. You can use this stand alone installer to add client tools and their related components to an existing installation.

The Client Tools installation program enables you to select which client tools to install and to assess disk space costs.

Note:
You can also install client tools by selecting the BusinessObjects Enterprise Custom or Expand install option.

BusinessObjects Enterprise Client Components

The client components are rich client tools that provide end users with access to BusinessObjects Enterprise server functions. Client component tools are only available for Windows operating systems, but do connect to servers running non-Windows operating systems.

To install client components on a BusinessObjects Enterprise server system, you must use the BusinessObjects Enterprise setup program "Custom or Expand install" option. Do not attempt to install client components on a server system by installing the stand-alone client tool installer, which is intended to install on client systems only. The available tools are:

Client tool	Description
Desktop Intelligence	An integrated query, reporting, and analysis tool to access your organization's data for presentation and analysis in a Desktop Intelligence document.
Web Intelligence Rich Client	Provides business users an interactive and flexible interface for building and analyzing reports from your organization's data over the web, through a secured intra- or extranet.
Data Source Migration Wizard	Migrates reports based on Crystal queries, dictionaries, or InfoViews to BusinessObjects Enterprise.
Business View Manager	Provides relational views of information for creating and modifying Data Connections, Dynamic Data Connections, Data Foundations, Business Elements, or Business Views.
Report Conversion Tool	Converts Desktop Intelligence reports (`.rep` files) to Web Intelligence (`.wid`) format. Converted files can then be published to the Central Management Server (CMS).
Import Wizard	Imports user, group, object, or folder content from previous and current Crystal or BusinessObjects Enterprise deployments.
Publishing Wizard	Publishes and sets properties for multiple reports in BusinessObjects Enterprise.
Query as a Web Service	Creates custom web services for specific queries using Business Objects Web Services.
Universe Builder	Creates universe connections for Web Intelligence and Desktop Intelligence documents.

Client tool	Description
Universe Designer	Provides a graphical interface to select and view tables in a database.
Developer Components	Software Development Kits (SDK) with wizards and templates for integrating BusinessObjects Enterprise functionality into your interactive web applications: • BusinessObjects Enterprise .NET SDK. If the installation program detects the .NET Framework 1.1 or 2.0, it automatically installs the BusinessObjects Enterprise .NET SDK for .NET Framework 1.1 or 2.0. You can also use the BusinessObjects Enterprise XI 3.1 .NET runtime redistributable package to install the BusinessObjects Enterprise .NET SDK for .NET Framework 2.0. • BusinessObjects Enterprise Java SDK. • BusinessObjects Enterprise Web Services SDK.
Translation Manager	Defines translations for multilingual documents and prompts. Supports Universe Designer universes and Web Intelligence documents.

To install client tools

A product distribution DVD for the BusinessObjects Enterprise Client Tools Installation.

1. Run `setup.exe` from the root directory of your product distribution.
2. Click **Install** to launch the installation program.

Note:
If you are installing from a DVD and if the Autoplay is enabled for your DVD-ROM drive, the Autorun program will start automatically. "Please Choose Setup Language" is displayed.

3. Select the language for the installation from the pull-down list provided.

   You have a choice of the following languages for setup:

   - Chinese Simplified
   - Chinese Traditional
   - Danish
   - Dutch
   - English
   - French
   - German
   - Italian
   - Japanese
   - Korean
   - Norwegian
   - Polish
   - Portuguese (Brazil)
   - Russian
   - Spanish
   - Swedish
   - Thai

4. Check the **Create log file during installation box** if you want to create an installation log file.

   The log file is saved under the following directory:
   `<INSTALLDIR>\BusinessObjects Enterprise 12.0\Logging`.

5. Click **OK**.

   The "Welcome to the BusinessObjects Enterprise Installation Wizard" is displayed after you specify a language for the installation.

6. Click **Next** to proceed with the installation.

   Note:
   Click **Cancel** to abort the installation

   If you are installing BusinessObjects Enterprise on Windows XP Service Pack 2 or higher, is message is displayed. Click **OK** to continue with the installation.

   The "License Agreement" screen is displayed

7. Select **I accept the License Agreement** and click **Next**.

   The "Choose Language Packs" screen is displayed.

8. Select the Language Packs you want to install with the client tools click **Next**.

   The language packs currently available for installation include:

   - English
   - French
   - Japanese
   - German
   - Spanish
   - Italian
   - Chinese Simplified
   - Chinese Traditional
   - Korean
   - Dutch
   - Swedish
   - Portuguese (Brazil)

   Note:
   English is a required language and is automatically selected.

   Tip:
   Select the **All Languages** box to select all the available language packs.

   The "Directory Selection" screen is displayed.

9. Type the installation directory for the client tools in **Destination Folder** or accept the default selection and click **Next**.

   The "Select Features" screen is displayed.

10. Click the icon for a feature you want to select or deselect under the "BusinessObjects Enterprise Client Tools" node. When you have finished making your selections click **Next**.

    You can do any of the following:

    - Specify that the selected feature will be installed on the local hard drive.
    - Specify that the selected feature and its subfeatures will be installed on the local hard drive.
    - Specify that a selected feature and its subfeatures will not be installed.

Icon associated with feature	Meaning
	The feature and only the subfeatures you select will be installed on the local hard drive you specified in the Setup program.
	The feature and all its subfeatures will be installed on the local hard drive you specified earlier .
	The feature or subfeature is either unavailable or will not be installed.

a. Click **Disk Cost** to calculate if sufficient disk space is available for your selected features.

   A separate screen is displayed indicating storage space available on the local machine and mapped network drives. Drives that do not have enough disk space for the currently selected features are highlighted. Click **OK** to close to return to the "Select Features" screen.

The "Start Installation" screen is displayed.

11. Click **Next**.

    The installation process begins and is complete when the *BusinessObjects Enterprise XI Client Tools has been successfully installed* screen is displayed.

12. Click **Finish** to exit the installation.

Client Tools silent installations

There are two methods for running BusinessObjects Enterprise Client Tools installations directly from the command line:

- Scripted installations
- Silent installations

Both methods can be used to automate installations across multiple machines. The scripted installation method requires that you to specify an `.ini` file. The silent installation allows you to specify parameters for running `setup.exe`. The same parameters are used for both methods. It is recommended that you use the scripted installation method to run custom

installations, so that you avoid having to pass a large number of parameter settings directly through the command line. These installation methods are particularly useful when you need to quickly perform multiple installations. You can also integrate the scripts and commands into your own installation scripts.

Note:
If you pass a parameter directly in the command line, the setting will override any setting specified in the `.ini` file.

Related Topics

- *Specific .ini file parameters for setup.exe*
- *To create an installation .ini file*

Sample client tools .ini file

The following installation script was generated for a BusinessObjects Enterprise Client Tools installation. The Dutch language pack was added to the default English language pack.

```
[OTHER]
QUIET=/qa
[INSTALL]
CLIENTLANGUAGE="EN"
DATABASEAUDITDRIVER="MySQLDatabaseSubSystem"
DATABASEDRIVER="MySQLDatabaseSubSystem"
ENABLELOGFILE="1"
INSTALL.LP.EN.SELECTED="1"
INSTALL.LP.NL.SELECTED="1"
INSTALLDIR="C:\Program Files\Business Objects\"
INSTALLLEVEL="4"
WDEPLOY_LANGUAGES="en,nl"
[FEATURES]
REMOVE="UnivTransMgr"
ADDLOCAL="Complete,AlwaysInstall,BeforeInstall,VBA62,Re
porter,Clients,WRC,
DataSourceMigrationWizard,CrystalBVM,MetaDataDesigner,Con
versionTool,
ImportWizard,PubWiz,qaaws,Designer,JavaRASSDK,BOEJavaS
DK,JavaViewersSDK,
RebeanSDK,DevelopersFiles,WebServicesSDK,DADataFedera
tor,DataAccess,HPNeoview,
WebActivityLog,OLAP,MyCube,SOFA,DAMySQL,DAGenericOD
```

```
BC,SFORCE,XML,Universe,BDE,
dBase,FileSystem,DANETEZZA,DAMicrosoft,DAIBMDB2,IBM,Red
brick,DAIBMInformix,
OLE_DB_Data,DAProgressOpenEdge,DAOracle,SybaseAny
where,DASybase,SybaseASE,
SybaseIQ,SymantecACT,DANCRTeradata,TextDA,Btrieve,Charac
terSeparated,
ExportSupport,ExpDiskFile,ExpRichTextFormat,ExpWordfor
Windows,PDF,ExpText,
ExpExcel,ExpCrystalReports,XMLExport,LegacyXMLExport,Sam
plesEN,UserHelp,
LanguagePackCostingFeatureen,LanguagePackCostingFeature,
LanguagePackCostingFeaturenl"
ADDSOURCE=""
ADVERTISE=""
```

This script can now be used for future silent installations by including the file name and path in the command line as shown below:

```
setup.exe -r FILEPATH
```

Maintaining your Installation

chapter 11

BusinessObjects Enterprise maintenance operations

You can perform three maintenance operations on your installation of BusinessObjects Enterprise:

- **Modify**: this operation will identify the current components installed on your system. Using the "Select Feature" screen you can add or remove components from your current installation.

  Note:
  Adding an auditing database from the "Add/Remove Programs" applet requires you to configure the auditing database using the Central Configuration Manager (CCM). For information on configuring an auditing database with the CCM, see “Configuring auditing for servers on Windows” in the *SAP BusinessObjects Enterprise Administrator’s Guide*.

- **Repair**: this operation replaces missing or corrupt files, registry keys, and shortcuts. Preferences in the registry are restored to default values.
- **Remove**: this operation uninstalls BusinessObjects Enterprise. All language packs and patches will also be removed.

To enter maintenance mode

To enter maintenance mode for BusinessObjects Enterprise on Windows:

1. Go to **Start** > **Settings** > **Control Panel** > **Add or Remove Programs**.
2. Select **BusinessObjects Enterprise XI 3.1**.
3. Click **Change**.

   The "Application Maintenance" screen is displayed.

Installing and Running the Deployment Diagnostic Tool

Overview

The Deployment Diagnostic Tool is a Java-based application designed to verify basic operating functionality of a BusinessObjects Enterprise XI installation. It is an open-framework utility that allows for the development of additional test drivers through the use of various SDKs provided by Business Objects.

Note:
This tool is intended only for deployment validation purposes; any other uses are not supported by Business Objects.

The Deployment Diagnostic Tool is installed automatically with BusinessObjects XI Enterprise.

The following software is required to use the Diagnostic Tool:

- JDK 1.5 (included with your BusinessObjects Enterprise installation)
- Business Objects Enterprise XI installation
- BusinessObjects SKD

Tests you can perform

The default tests for the Deployment Diagnostic Tool include:

Test	Description
"Log On/Off "	Tests logging on and off BusinessObjects Enterprise.
"InfoView Test "	Tests logging on and off through InfoView.
"Web Intelligence Tier "	Tests creating, viewing, and scheduling a simple Web Intelligence documents.

Test	Description
"Crystal Reports Tier "	Tests creating and scheduling a simple Crystal Reports document.
"Start/Stop Servers "	connects to a CMS and queries for all available servers associated with it, then proceeds to stop and start each one.

Tests you can perform

The default tests for the Deployment Diagnostic Tool include:

Test	Description
"Log On/Off "	Tests logging on and off BusinessObjects Enterprise.
"InfoView Test "	Tests logging on and off through InfoView.
"Web Intelligence Tier "	Tests creating, viewing, and scheduling a simple Web Intelligence documents.
"Crystal Reports Tier "	Tests creating and scheduling a simple Crystal Reports document.
"Start/Stop Servers "	connects to a CMS and queries for all available servers associated with it, then proceeds to stop and start each one.

To run diagnostic tests in Windows

1. Click **Start** > **Programs** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **Diagnostic Tool**.

   The user logon screen appears.

2. In the **System** field, enter the hostname for the machine you want to connect to.

   Information for the local machine will appear by default.

3. Enter your user name and password and select the appropriate authentication type, then click **Logon**.

   If you are authenticated, the main application screen appears.

   The top pane of the tool contains a list of the test drivers that have been loaded into memory. This list is determined by the contents of the configuration file. By default all listed tests will be selected.

   The bottom pane is the console output and provides status updates while the tests are running. These updates remain on the pane after the tests are complete, but will be lost when you close the Diagnostic Tool window.

4. If you want to run a specific test or set of tests, de-select the tests you do not want to run by clicking the checkbox next to the test.
5. To run a test, click **Test** > **Run All Tests**.

   The tests are performed in the sequence that they appear in the "test drivers" pane, and a status update is provided in the console pane.

   Note:
   Some tests may take several minutes.

Upon completion of the diagnostic, the console reads 'Finished Testing' and provides a file path to the results log file (by default, log files are stored in `*BusinessObjects_Root*\common\4.0\java\lib\log\TestResults.xml`). All test drivers will conclude with either a 'pass' or a 'fail' status. Double-click the result to view further details. These details are also recorded in the log file.

To view the log file, either go to the location specified in the console pane, or select the **View** menu and then select **Log File**.

To run Diagnostic Test from Command Line

1. Open your command line interface.
2. Enter the following command:

"C:\Program Files\Business Objects\javasdk\jre\bin\java.exe" -jar diagnosticTool.jar -console -user *UserName* -password *Your Password* -system *SystemName* -authtype *AuthType*

Note:
This assumes you installed BuisnessObjects Enterprise to the default location. If you installed to a different folder, you will need to update the file path with your custom information.

The Diagnostic Tool launches.

Once the tool has finished running, you can view the log file for the results of the test. By default, this file is stored in *BusinessObjects_root*\common\4.0\java\lib\log\TestResults.xml

Example:

The following command launches the tool, opens a login dialog box, opens the tool interface in a window, and overrides the default configuration file and log file with the ones presented.

```
'java -jar diagnosticTool.jar -gui
-configfile 'c:\temp\config.xml' -logfile
'c:\log\log.xml'
```

Note:
If you want to bypass the login screen, you can uncomment the xml tags in the configuration file and fill in the necessary authentication tags, as shown below.

```
<authentication>
 <user>administrator</user>
 <password> </password>
 <system>TestBOESystem</system>
 <authtype>Enterprise</authtype>
</authentication>
```

Launching in CONSOLE mode

The following command launches the tool, automatically logs in with the credentials supplied, uses the default configuration file and log file, and automatically runs the test case.

```
'java -jar
    -diagnosticTool.jar -console
    -user Administrator -password 'Password'
    -system TestBOESystem -authtype Enterprise'
```

Deployment Diagnostic Tool parameters

Table 11-3: Deployment Diagnostic Tool command line parameters

Parameter	Description
gui	Runs the application in graphical mode
console	Runs the application in console mode
run	Launches and runs the test drivers immediately. Default behavior is to have the user manually initiate the tests.
configfile	Specifies the absolute or relative path to the configuration xml file which tells the tool what test drivers to run (optional).
logfile	Specifies the absolute or relative path to the results xml log file (optional).
user	Required if the tool is run in console mode. This is the BusinessObjects Enterprise user name that the tool uses to log in and it should have administrative rights.
password	Required if the tool is run in console mode. This is the BusinessObjects Enterprise user password.

Parameter	Description
system	Required if the tool is run in console mode. This is the machine name followed by the port number for the CMS the tool will connect to (e.g. CMSserver:6400). An IP address can be used in place of the machine name.
authtype	Required if the tool is run in console mode. This is the authentication method used to connect the tool to BusinessObjects Enterprise. Possible values: • Enterprise • LDAP • WinAD • WindowsNT

Deployment Diagnostic Tool settings

Configuration files

Configuration files are used to determine which tests to run, the order in which to run them, and any parameters for those tests.

By default, these files are located in the `c:Program Files\Business Objects\common\4.0\java\lib` directory.

Note:
This assumes you installed BuisnessObjects Enterprise to the default location. If you installed to a different folder, you will need to update the file path with your custom information.

To select configuration files

1. Click **Test** > **Set Config File**.
   A file dialog appears. The default XML file `TestClasses.xml` is currently selected.

2. Navigate to the XML file you want to set and select it.
3. Click **Open**, then click **OK**.

This will set the configuration XML for the tool.

Log files

Log files provide a permanent record of the results of the tests run by the Deployment Diagnostic Tool.

By default the files are stored in `C:\Program Files\Business Objects\common\4.0\java\lib\log\TestResults.xml`.

Note:
This assumes you installed BuisnessObjects Enterprise to the default location. If you installed to a different folder, you will need to update the file path with your custom information.

To set a custom log file location

1. Click **Test** > **Set Log File**.
   A file dialog will appear.
2. Browse to the location where you want to store the log file.
3. Type a name for the log file, and click **Open**.

Log files for tests will now appear in the directory you selected.

Uninstalling BusinessObjects Enterprise from Windows

Note:
The steps below will remove all BusinessObjects Enterprise components from the system. To uninstall a service pack, fix pack, or other post-install update, refer to the *SAP BusinessObjects Enterprise Update Install and Deployment Guide for Windows*.

It is recommended that you back up reports, documents and system information before uninstalling BusinessObjects Enterprise. For more

information on backing up your system see “Managing and Configuring Servers” in the *SAP BusinessObjects Enterprise Administrator's Guide*.

To uninstall BusinessObjects Enterprise from your system:

1. Go to **Start** > **Programs** > **BusinessObjects XI 3.1** > **BusinessObjects Enterprise** > **Central Configuration Manager**.

   The CCM console is displayed.
2. Right-click to highlight all listed servers and select **Stop**.

   For more information on stopping servers see “Managing and Configuring Servers” in the *SAP BusinessObjects Enterprise Administrator's Guide.*
3. Go to **Start** > **Settings** > **Control Panel** > **Add or Remove Programs**.
4. Select **BusinessObjects Enterprise XI 3.1**.
5. Click **Remove**.

   The "Add or Remove Programs" dialog prompts to confirm that you want to remove BusinessObjects Enterprise.
6. Click **Yes.**

   The system is reconfigured, and you are returned to "Add or Remove Programs".

Your BusinessObjects Enterprise installation may have included an installation of the Web Application Container Service (WACS). WACS is also removed during the uninstall process.

Note:
Only web applications deployed on a Tomcat server installed through the BusinessObjects Enterprise installer are automatically removed. You will manually have to remove web applications deployed on other servers.

The installer removes only the files that it originally installed. Folders or files created after the installation, for example log or report files, are not uninstalled by the uninstallation process.

Silent uninstallation

Note:
This step will remove all BusinessObjects Enterprise components from the system. To uninstall a service pack, fix pack, or other post-install update,

refer to the *SAP BusinessObjects Enterprise Update Install and Deployment Guide for Windows*.

If the installation source is available, you can use the command-line console to uninstall BusinessObjects Enterprise. In the command-line specify the following method:

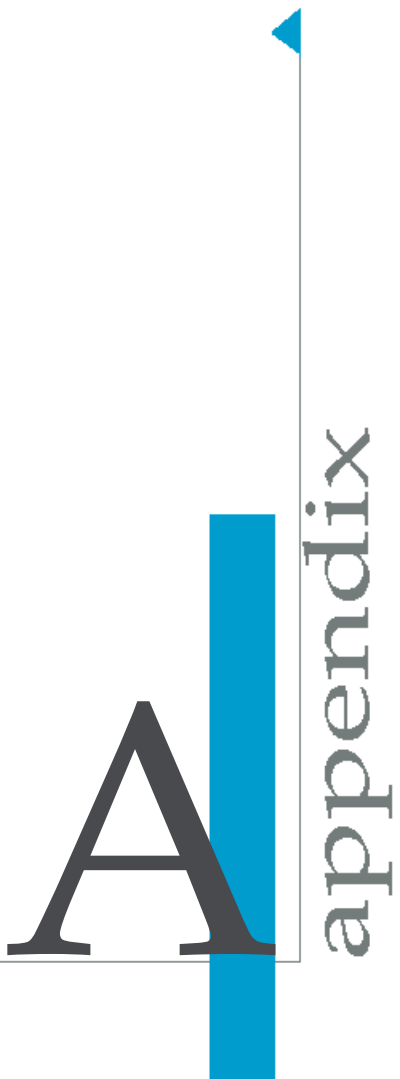
```
setup.exe REMOVE=ALL
```

The installation log file

The installation log file contains information on all the parameter settings used in a BusinessObjects Enterprise installation. The log file can be used as a reference or to troubleshoot installation errors. The name of the initial log file is `BOEInstall_0.log` and it is saved under the following directory: `<INSTALLDIR>\BusinessObjects Enterprise 12.0\Logging`. Each time you run the BusinessObjects Enterprise installer, a new log file is generated. For example after the initial installation you choose run the “Modify” maintenance operation. Once the process is completed, `BOEInstall_1.log` is stored in the `Logging` directory.

Information specific to web application deployment is also included in the log file.

More Information



Information Resource	Location
SAP BusinessObjects product information	*http://www.sap.com*
SAP Help Portal	Select *http://help.sap.com* > SAP BusinessObjects. You can access the most up-to-date documentation covering all SAP BusinessObjects products and their deployment at the SAP Help Portal. You can download PDF versions or installable HTML libraries. Certain guides are stored on the SAP Service Marketplace and are not available from the SAP Help Portal. These guides are listed on the Help Portal accompanied by a link to the SAP Service Marketplace. Customers with a maintenance agreement have an authorized user ID to access this site. To obtain an ID, contact your customer support representative.
SAP Service Marketplace	*http://service.sap.com/bosap-support* > Documentation • Installation guides: *https://service.sap.com/bosap-instguides* • Release notes: *http://service.sap.com/releasenotes* The SAP Service Marketplace stores certain installation guides, upgrade and migration guides, deployment guides, release notes and Supported Platforms documents. Customers with a maintenance agreement have an authorized user ID to access this site. Contact your customer support representative to obtain an ID. If you are redirected to the SAP Service Marketplace from the SAP Help Portal, use the menu in the navigation pane on the left to locate the category containing the documentation you want to access.
Developer resources	*https://boc.sdn.sap.com/* *https://www.sdn.sap.com/irj/sdn/businessobjects-sdklibrary*

Information Resource	Location
SAP BusinessObjects articles on the SAP Community Network	*https://www.sdn.sap.com/irj/boc/businessobjects-articles* These articles were formerly known as technical papers.
Notes	*https://service.sap.com/notes* These notes were formerly known as Knowledge Base articles.
Forums on the SAP Community Network	*https://www.sdn.sap.com/irj/scn/forums*
Training	*http://www.sap.com/services/education* From traditional classroom learning to targeted e-learning seminars, we can offer a training package to suit your learning needs and preferred learning style.
Online customer support	*http://service.sap.com/bosap-support* The SAP Support Portal contains information about Customer Support programs and services. It also has links to a wide range of technical information and downloads. Customers with a maintenance agreement have an authorized user ID to access this site. To obtain an ID, contact your customer support representative.
Consulting	*http://www.sap.com/services/bysubject/businessobjectsconsulting* Consultants can accompany you from the initial analysis stage to the delivery of your deployment project. Expertise is available in topics such as relational and multidimensional databases, connectivity, database design tools, and customized embedding technology.

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